3.11.18 The Forest's preferred alternative was seen to promote species both economically undesirable and more at risk to insects and diseases.

Harvest volumes are mostly derived from a growth and yield model (FVS) and an economic model tied to FVS (FORPLAN) and suitable lands These models, accepted for Forest Service use, when run with RGNF stand data, selected mostly spruce/fir stands as economical for harvesting The effects of fire suppression and grazing on stand structure has been notable in Douglas-fir/mixed conifer and ponderosa pine stands. Though the RGNF is genuinely concerned with elevated populations of western spruce budworm in Douglas-fir/mixed conifer, and is also concerned with the gradual encroachment of ponderosa pine stands by Douglas-fir and associated species, these areas are often not economically feasible for harvesting As for spruce/fir stands, though standards and guidelines and silvicultural prescriptions favor, in general, regeneration of subalpine fir over Engelmann spruce, such conditions mimic conditions found naturally Typically, subalpine fir has more stems per acre in the lower size classes with the longer-lived spruce eventually dominating the overstory Duplicating these conditions could serve in promoting the functional integrity of spruce/fir forests

3.11.19 "We fail to see how the preferred alternative.." will meet the goal of reducing impacts of insects and disease by encouraging a mosaic of size/age classes, stocking levels, and species mixes.

With the RGNF utilizing landscape-based spatial analysis, and as more knowledge is gained in comparing current conditions in manipulated environments versus unmanipulated reference areas, the Forest will better grasp what mosaic of species and stand structures best assures biological sustainability Harvesting can occur to meet the sole objective of shifting existing conditions to conditions reflecting the range of natural variability. The inherent flexibility of the preferred alternative will allow the Forest to adjust its management as our knowledge increases When harvesting is planned, forest health will always be an issue if not an objective

3.11.20 Statements were submitted that forests "must be managed", that dead wood inhibits the growth of new trees, and that "Proper management .. can only increase our forest growth. "

Management of the Forest can take many forms, including decisions of where, and where not, to harvest Logging is a tool in forest management to reach an agreed-upon objective, whether that objective is to establish a new stand while utilizing the harvested wood, or to meet some other objective Removing live trees can enhance the growth of trees immediately surrounding the removed trees, an effect referred to as "release" (because the surrounding trees are "released" from the competitive interaction -- for water, nutrients, and sunlight -- that occurred before the trees were removed). Dead wood, though taking up some space, has little effect on inhibiting the growth of new trees The removal of dead wood can make it easier for grazing animals to get to understory vegetation, but those same grazing animals can severely damage seedling or sapling trees

The RGNF is concerned not only with tree growth and health but with the sustainability of all plants and animals found in the Forest We feel the preferred alternative reflects a balanced mix for all forest resources

3.11.21 Some graphs of timber cover types, indicating that most stands are "in the middle [size] class", conflict with statements that suggest Forest stands are mature to late-successional These graphs do not truly represent species age potential. Also, "..data used to support the age-class conclusions are from the Rocky Mountain Region..", not the Province What is the source for data supporting statements that the Forest is dominated by mature to late-successional forest stands?

The graphs referred to are in the section describing forest cover types for the entire Rocky Mountain Region These graphs reflect the percent of cover type by age class, they are not meant to show the potential age by species Refer to the "Cover Types" section specifically

dealing with the RGNF, which reflects the older nature of Forest stands These conclusions are drawn from on-the-ground inventory data
Data are not typically collected and displayed by the National Hierarchy of Ecological Units, but this data should be representative of the Province

3 11 22 **Concerns were raised that terms like 'mature' were "deceiving" when used to describe structural stages; or that less of the Forest's spruce/fir is mature than is represented in the DEIS/FP. A suggestion was made to add a structural stage between the existing classes of 3 and 4 to better describe RGNF timber stands.**

The structural stage classification is one used and accepted by National Forests in the Rocky Mountain Region and the Colorado Division of Wildlife The term "mature" is meant to describe a period in the life cycle of a stand to help in characterizing the conditions at that period of time

Structural stage 3 represents pole-sized trees, stage 4 represents sawtimber-sized trees This diameter/size-class breakdown is very appropriate for describing stand conditions on the Forest

3 11.23 **Silvicultural standard #3 should have last sentence read "...the uncut units WILL be large enough..."; and the minimum size for uncut areas should be specified**

The sentence in question begins "If the objectives INCLUDE [emphasis added] provisions for old-growth associated species ." The Forest feels that the present wording, " the uncut units could be large enough. " is more appropriate because "old-growth associated species" has never been, and is not expected to be in the future, the only issue in an area considered for harvest Also, the issue of what "size" constitutes an "ecological unit" is not universally known for any species at this time Therefore, the current wording is more appropriate

3.11.24 **Biodiversity Guideline #2 may be in conflict with aspen's range of natural variability.**

Though it is possible that aspen acreage reached a peak in the mid-1900's, one cannot conclude that aspen was beyond its RNV Aspen sites are important on the RGNF for many reasons, and with a noticeable decline in aspen dominance seen throughout the West, this guideline is important to retain and implement

3.11 25 **Silvicultural Guidelines 7 and 14 are the same. The wording should be changed from "most" to "all".**

Thanks for pointing out our mistake, which will be corrected in the final "Most" is more appropriate to cover the full range of conditions that could be found on the Forest

3.11.26 **"Delete [Silvicultural] guidelines 11 and 12.." as they are inappropriate for the RGNF**

Guideline #11 has applications not related to industrial forestry, such as reducing competing vegetation in areas where ponderosa pine has been declining The Forest has decided to drop Guideline #12 because we feel that Biodiversity Guidelines (particularly # 2) will cover the issue of aspen's value in forest composition

3.11.27 **The DEIS, on page 3-49, states that the majority of acreage is in Structure Class 5 though the table shows only 40% in this class.**

The statement will be changed to reflect that more aspen is in Structure Class 5 than other classes

3 11.28 **"..the size of trees to be harvested should only be those of mature proportions - trunk diameter of 10 inches...not 5 inches."**

Trees of all sizes are cut on the Forest for many purposes, including thinning, sanitation cutting (such as cutting insect or disease infested trees), house log and sawlog cutting, and firewood cutting The harvesting of sawtimber, to regenerate a new stand and

provide wood products, can occur if trees are over 7-8 inches in diameter In even-aged harvests, stands cannot be cut unless they have reached culmination of mean annual increment At that point in a stand's development, some trees of lesser quality may have only reached a diameter of 7- 8 inches even though such trees are of a mature age In uneven-aged harvests, trees are cut of all sizes in order to maintain a balance of age classes. Regardless of either type of harvest, the intent is to maintain full, or near full, site occupancy of healthy growing trees In order to reach that goal, trees smaller than 10 inches need to be harvested

3.11 29 "Any silvicultural practice within a river corridor is suspect."

River corridors are special areas to people, with different people having varying expectations as to how these corridors should appear Some people expect the Forest to take a proactive approach to managing river corridors so that the accompanying forest stands are green and healthy For instance, concerns have been raised on the Forest as to why the RGNF isn't doing anything about the current western spruce budworm infestation in mixed conifer stands along the Rio Grande River between South Fork and Creede Regardless of the reason for applying a treatment along a river corridor, silvicultural practices can be used as tools to move towards, or reach, some desired outcome

3.11.30 A suggestion was made to change Silviculture Guideline #5 to read (first sentence) " more than one-third of the COMMON edge .".

Such a change would focus attention away from the natural opening edge and appears to be more confusing than leaving the wording as is

3.11.31 "We support and encourage aspen stand regeneration by conversion of conifer stands. Aspen regeneration should not be looked at only by cutting existing aspen stands. ..also support the retention of old growth aspen.."

The Forest will use both the spatial analysis model and on-site visits to identify areas where aspen is losing dominance within a landscape. Hence, proactive measures to regenerate aspen, including the cutting of conifer stands, would be appropriate. The Forest will utilize Biological Guidelines, dealing with aspen and old growth, to help support and direct the retention of old-growth aspen stands

3.11.32 Concerns were raised that the DEIS/FP did not adequately disclose effects of harvesting on old-growth ponderosa pine stands

Harvesting will occur in such stands to enhance the pine and remove other species, such as Douglas-fir and white fir, thereby preventing the loss of old-growth ponderosa pine stands

3 11.33 Even-aged management was not fully evaluated relative to harm to species or contrast with natural disturbance. Specifically, the effects of shelterwood cuts, including second entries ("seed" or "establishment" cuts), need to be disclosed.

The preferred alternative is expected to influence, with even-aged treatments, less than 0 6 percent of the Forest for the ten-year period of the plan (This percentage includes the area treated with irregular shelterwood, which is actually two-aged management) When viewed in context of the entire Forest, the effects of even-aged management are minimal Also, many of these silvicultural treatments will be designed to mimic, at least in magnitude, those types of natural disturbances that result in entire stand replacement, as what happens with even-aged treatments
The final EIS includes additional information on the effects of shelterwood cuts

3.11.34 Concerns were expressed that the full range of cutting methods were not examined in forest plan alternatives; or that the amounts and types of silvicultural treatments modeled (in FORPLAN) "..are not likely to be used in implementation..."

The Forest did look at a range of cutting methods varying across alternatives and management areas to reflect the theme of both alternatives and MA's The preferred alternative has been modified to include the use of irregular shelterwood, a silvicultural method not modeled in the draft alternatives With the range of cutting methods reflecting the themes of alternative and MA, we disagree that methods modeled in FORPLAN are not realistic

3.11.35 Clarification was requested for the statement "Silvicultural standards and guidelines should be applied at the watershed and landscape level.." (draft FP Silviculture Guideline #2).

The statement serves to point out that not all silvicultural standards/guidelines are specific to a stand-level perspective For example, Standard #3 and Guidelines #1, 6, and 11 are examples that broaden the silvicultural focus from the stand level to some more extensive level

Implementation of this guideline will be through direction of harvest activities on a landscape-scale basis

3 11 36 Silviculture guideline #6, from the draft FP, "..is confusing."

This guideline tries to grasp the challenging nature of landscape-level management and bringing such varying scales under scrutiny We feel the guideline helps in visualizing landscapes, which can be, in of itself, confusing and complex

3.11.37 Silviculture guideline #10 is unneeded because of Biological Standard #1.

Important information contained within Silviculture Guideline #10, from the draft FP, has been moved to be included within Biological Standard #1

3.11.38 The Analysis of the Management Situation document states that the reduction in ASQ, since the late 1980's, is largely a result of the Forest being unable to comply with standards and guidelines. The predominant silvicultural prescriptions applied during the first plan period were the first step of shelterwood; but in either shelterwood preparation or uneven-aged cuts in spruce/fir, the cut "..must be light and produces essentially the same effect. These results do not support the argument for the standards and guidelines as the reason for the lack of timber sales production."

The drop in ASQ can be attributed to several reasons, including direct and indirect effects of standards and guidelines

The predominant silvicultural prescription applied during the late 70's and throughout the 80's was the shelterwood prep cut Towards the late 80's, the Forest began using the shelterwood seed cut across some moderately large areas and found that the shelterwood system, with the seed cut, could exceed standards/guidelines for big-game hiding cover Most shelterwood cuts were designed to remove 1/3 of the overstory, thereby eliminating the overstory in three cuts

In contrast, most uneven-aged prescriptions have been designed to create or foster five age classes, or in other words, cut about 1/5 of the overstory with each entry The uneven-aged prescriptions appear as lighter cuts than shelterwood, and more trees are retained in the smaller size classes than larger size classes As a result, hiding cover is retained in uneven-aged cuts while shelterwood harvesting is often suspected to exceed hiding cover standards with the second entry

A decline in timber-management budgeted funds has coincided with the decline in ASQ An indirect result of limited funding has been that the Forest could not fully comply with existing standards and guidelines -- from a shortage of trained personnel to ensure proper design of projects to the inability to keep pace with monitoring and evaluation responsibilities -- which has led to increased environmental scrutiny, time-consuming NEPA analyses, and appeals and litigation

3.11.39 A suggestion was made for the Forest to analyze what portion of limbs break off in the woods during logging operations; and to analyze the feasibility of returning a portion, or all, limbs and tops back to the woods following operations on the landing.

RGNF personnel have observed limb breakage during logging operations and can offer the following estimates Though limb breakage can be highly variable depending on species (some species are more brittle than others), ground conditions (more breakage on broken, rocky ground), about 35-40% of the limbs break off during warm season operations and about 60% break off during cold season operations These estimates need to be substantiated

Another issue is how much of existing small slash is drawn out of the woods onto roads, into landings, by the sweeping action of the skidded logs with branches No reliable estimate can be made of this impact at this time

The Forest is not aware of any studies, dealing with long-term nutrient recycling related to fine slash, that looked at the effects of varying proportions of slash This is probably due to the incredible complexity of slash and nutrient availability

The Forest has looked at the feasibility of returning slash following operations at the landing The Forest objects to the redistribution of slash after skidding operations are completed because the added trips to move slash back into the woods, after skidding is complete, could result in increased compaction in forest soils Current methods have little effect on compaction because the slash can be redistributed as skidders return into the stands to retrieve another load of logs

A more in-depth study of limb breakage was impossible to complete before issuance of this final EIS/FP The Forest encourages other entities to initiate studies of this nature to better understand these effects

3.11.40 Silvicultural Guideline #12 "..appears to conflict with other statements in the Draft Plan and DEIS." The FP should ". quantify objectives rather than [use] highly subjective terms..".

This guideline emphasizes the importance of aspen stands in the context of forest composition The actual amount of aspen to favor over other cover types cannot be quantified until more information is gathered on reference conditions The application of the spatial analysis model in comparing reference conditions to existing conditions may allow the Forest, sometime in the future, to actually quantify the proportion of aspen to maintain on the Forest

3.11.41 The Draft EIS/FP does not address how the Forest will meet national and regional policies on timber stand improvement (TSI). The FP needs to outline " what structural/age class distributions will be achieved..."

The Forest has not quantified structural/age class distributions due to the desire of the RGNF to begin to use reference conditions to guide and inform us on what is ecologically sustainable But there are several guidelines that serve to direct timber stand improvement activities, including Silviculture Guidelines #1, 9, and 10 The application of these guidelines fits well with national and regional policies

3.11.42 Silviculture Standard #4 should read "..the cutting MUST be made.." instead of "..should be made..".

To be consistent with CFR wording, the standard now reads " SHALL be made "

3.11.42 Draft FP Silviculture Standard #6 must be changed to include shelterwood seed cut, because the Forest Service must specify when the final cut of a shelterwood is proposed and it is after the seed cut when regeneration is supposed to begin

In silvicultural prescriptions, the timing of the final harvest or overstory removal of a shelterwood is identified When prescribing the irregular shelterwood method, as in two-aged management, the final overstory removal is either delayed or not scheduled in order to meet certain specific objectives But in either case, the silvicultural prescription document identifies when the stand is anticipated to be fully stocked In fact, the overstory removal has been modeled to occur long after the stand should be fully stocked so that the regenerated stand is of sufficient height to close the opening and meet opening guidelines

The standard, as written, is correct in identifying final harvest removals and consistent with legal *requirements*

3.11.43 Silviculture Guideline #15 (DEIS) should have wording " (or surpassed 95 percent of the)..." dropped because NFMA intends for stands to have reached 100% of CMAI.

The phrase "shall generally have reached [CMAI] " has been quantified by the Forest Service as 95 percent

3.11.44 Regeneration efforts should be begun sooner than 5 years after harvest removals.

Regeneration is an on-going process on the RGNF The 5-year regeneration requirement is the maximum time for regeneration to establish after final harvest removals The Forest tries to adapt to on-ground conditions to foster natural regeneration Generally, management strategies are designed to favor natural regeneration before harvesting begins (e g , flagging skid trails to avoid patches of advanced regeneration)

3.11.45 "What will be the q-ratio, maximum diameter, and residual basal area for management? What will be the cutting cycle?" [for uneven-aged management in the Cross landscape].

Q-ratio, maximum diameter, residual basal area, and cutting cycle are parameters determined, by site/stand, after careful observation of such stands This site-specific information cannot be identified at a forest or landscape level

3.11.46 The RGNF "..could better promote biological diversity by ... guaranteeing that any harvesting will be dominated by uneven-aged management... by including this *statement in the standards and guidelines in both the forestwide and applicable* management area designations, and by ensuring through outside peer review that the current proposed silvicultural standards and guidelines reflect this emphasis."

The Forest feels that the preferred alternative reflects protection of biological diversity by allowing natural processes to occur over the bulk of the Forest Initiating an effort to base management activities to reference conditions (with the use of the spatial analysis model, Guideline #1 for both MA 5 11 and 5 13) should further aid in protecting biological diversity by mimicking composition and structure

Uneven-aged management is not biologically sound in all forest types or under all conditions The Forest's dense and multi-storied mixed conifer stands are highly susceptible to western spruce budworm infestations Neither aspen nor lodgepole pine regenerate effectively under uneven-aged management Manipulating even-aged stands to become uneven-aged (or vice versa) can be expensive, inefficient, and adversely compact soils from frequent entries And the more repetitive entries characterized by uneven-aged management may be undesirable if objectives are to leave a stand undisturbed for long periods of time

Therefore it is unnecessary to specify harvest prescription emphasis within standards and guidelines

3.11 47 A suggestion was made to delete Silviculture Guideline #'s 9, 11, and 13 (page III-12 of the draft FP).

These guidelines are supportive of objectives contained within the Forest Plan (Within the final FP, they are Guidelines #9, 10, and 11)

3 11.48 **On the San Juan National Forest (where timber cover types are similar to the RGNF), timber volume actually increased as that forest switched emphasis from even-aged to uneven-aged management. "There should not be a reduction in yield because of the changes in silvicultural systems."**

The San Juan has similar cover types but a much different mix of types in terms of occupied area There is a much greater proportion of ponderosa pine stands, more mixed conifer, and a lesser proportion of spruce/fir, than is found on the RGNF Site productivity is greater on the San Juan than on the RGNF, and temperatures and growing seasons are slightly higher and longer, respectively, on the San Juan. Thus, we would expect timber yields to vary between the two forests

3.11.49 **A regenerated stand could meet minimum stocking guidelines, for all cover types except aspen, and yet still be considered an opening based on opening guidelines. This could cause confusion in implementation and have impacts on expected yields**

Openings and stocking are two differing issues FORPLAN has been modeled to account for these issues on timber volume yields When harvest systems are used which may, or will, create openings, both constraints will need to be monitored to ensure they are followed

4. Range Resources

4.1 **Livestock grazing should not be allowed on National Forest Lands**

Livestock grazing is an authorized use of National Forest lands, but livestock must be managed to provide long-term sustainability of the resources

4 2 **How will the Forest address the problem that 32% of the rangelands are in poor or very poor condition?**

The EIS and Forest Land Management Plan will be rewritten to better describe how these rangelands will be restored

4 3 **Livestock grazing affects vegetative composition**

Improper grazing can affect vegetative composition The implementation of Standards and Guidelines, along with an approved Allotment Management Plan, will correct rangelands in degraded conditions and maintain those in satisfactory condition.

4 4 **Suitable lands were not adequately analyzed in the DEIS**

The description and identification of suitable rangelands will be re-analyzed for the FEIS Maps identifying these lands by alternative will be included

4.5 **The Range section is weakly or poorly written, and is deficient in analyzing livestock grazing**

The FEIS and FLMP will have a more comprehensive Range section, with a clarified and improved analysis

4.6 **Lands described as in unsatisfactory condition should not be grazed**

Removal of livestock grazing from these areas is not desirable or necessary when requirements are in place to correct the unsatisfactory conditions

Successful implementation of the Forest Plan Standards and Guidelines will begin to improve unsatisfactory conditions, moving the existing conditions towards desired conditions

In addition, Allotment Management Plans are scheduled that will implement site-specific management objectives to correct unsatisfactory conditions

4 7 Grazing should not be allowed within Wilderness Areas.

Grazing in Wilderness Areas is authorized by the Wilderness Act of 1964, thus this issue is outside the scope of this document

4.8 Grazing fees should be increased

Grazing fees are determined by a formula set by Congress, and therefore are outside the scope of this EIS and Forest Land Management Plan

4.9 Reducing livestock numbers is a stupid idea

We are required to analyze a full range of alternatives The preferred alternative does not advocate a reduction in livestock numbers or animal unit months.

4.10 Large areas of land should be set aside for no grazing, to serve as a scientific study area which will show the biological impacts of grazing elsewhere

Grazing would not be allowed in the proposed Research Natural Areas(See chapters 3 and 4 of the Revised Plan), these can be compared with lands that are grazed by livestock

4.11 Riparian management has been glossed over, and specific management recommendations should be stipulated

A Riparian section will be added to the FEIS and Forest Land Management Plan Also, the Standards and Guidelines for riparian management will be changed from inches of stubble height to the adoption of Clary and Webster guidelines for management These will incorporate time of grazing, type of grazing system, stubble heights, range condition, and stream-bank stability in the management of these areas

4.12 RNA's should be closed to grazing and logging, and should be fenced

The RNA's will be closed to these activities, and will be fenced where it makes sense to do so

4.13 There are data omitted from the analysis, and other errors

Factual-information errors will be corrected, or additional information provided, in the *Final EIS and Forest Land Management Plan*

4.14 Alternative D would increase AUM's; where would these be allocated?

The DEIS analysis estimated that AUM's would be increased in decade 5 The allocation of these AUMs would be determined at that time through a new EIS and Forest Land Management Plan, as this one will be out-of-date in 10 to 15 years

4.15 When will the type of grazing system on an allotment be determined?

The type of grazing system implemented on an allotment is determined through the Environmental Assessment and described in the Allotment Management Plan

4.16 Are utilization levels and stubble heights used for interim management, and are they incorporated in the Allotment Management Plan?

Utilization guidelines were developed to allow the improvement or maintenance of the rangeland and riparian resource where there is not an approved AMP These guidelines may be included in new AMPs or modified if the type of grazing system warrants

4.17 Wildlife should be given first priority whenever conflicts exist between wildlife and livestock

The Forest Land Management Plan provides for forage allocations to wildlife first and livestock second Habitat needs have also been accounted for in critical habitat-management areas

4.18 Some allotments should be closed to grazing, to protect some nonforested habitats

Some allotments will be closed to grazing because of being designated Research Natural Areas, or because of conflicts with other resources

4.19 The fastest way to improve soil and water conditions is to remove livestock.

Research has shown that soil and water conditions can be improved through proper livestock grazing Reference materials will be cited in the final documents

4.20 Grazing in Wilderness Areas should be studied

Grazing is allowed in Wilderness Areas by the Wilderness Act of 1964 The Monitoring and Evaluation section of the Forest Land Management Plan provides a method to determine whether desired conditions are being met

4.21 The respondent does not agree with the range analysis done on the Cattle Mountain Allotment

The range analysis conducted on the Cattle Mountain allotment is outside the scope of this Plan However, plant composition, soils, watershed, recreation, and wildlife resources were all analyzed during the inspection of the Cattle Mountain allotment

4.22 Maps of degraded rangelands should be included

We'll consider this for the final documents

4 24 It is not sufficient to monitor 10% of suitable grazing lands each year

The 10% figure referred to was for inventory of range condition or seral stage each year Monitoring is separate from the inventory work Inventory takes more time than monitoring, and 10% per year is a reasonable goal

4.25 Wildlife populations should not be reduced in order to provide forage for domestic livestock

Wildlife are always considered first in the determination of allowable capacity If there is more demand for forage than the supply of forage, then and only then would a reduction in wildlife populations (special hunts or increased permits) be considered

4.26 Alternative F was not adequately considered

A new analysis for the Range section will be developed for the FEIS and Forest Land Management Plan Alternative F will be re-analyzed along with the other alternatives

4.27 Livestock/wildlife conflicts can be resolved by changes in management; the Plan should provide flexibility for this

We hope the guidance in the Forest Plan is flexible enough to resolve livestock/wildlife conflicts at the project level Site-specific recommendations should be determined at the

Allotment Management Plan level, because each allotment plan will identify a different mix of resources and public concerns

4.28 Grazing is treated differently than other resources in the DEIS

Both timber sales and livestock grazing must meet desired conditions Both timber and grazing projects must have project level decisions made before any on-the-ground activities can occur When dealing with grazing, the Allotment Management Plan is the document which details all activities and decisions for the grazing allotment

4.29 The respondent requests that the RGNF consider and use the extensive forest health/grazing bibliography and all literature cited sections.

All bibliographies and literature citations are reviewed and integrated into the analysis of affects and can have impacts on our decisions

4.30 Why does Prescription 6 6 not allow timber harvest?

Prescription 6 6 does allow the cutting of trees for various reasons, but the lands in this prescription do not contribute to the ASQ of the Forest The predominant cover types of the 6 6 lands are grasses and forbs, with some low density tree cover types The so cover types within the 6 6 prescription along with their locations indicate a very low likelihood or reason for timber harvesting

4.31 The respondent wants a site-specific commitment to restore rangelands and riparian areas degraded by cattle grazing.

The implementation of watershed and utilization guidelines is a start on restoring these areas The Allotment Management Plan will contain site-specific recommendations to restore any degraded lands on that allotment

4.32 Is there flexibility in writing the Allotment Management Plan, or must the guidelines be followed exactly?

Guidelines can be changed through the NEPA process when an Environmental Assessment and AMP are developed for the allotment

4.33 The respondent is concerned that grazing in Wilderness Areas will be closed based on politics and not science; and that the suitability analysis should be conducted now
These areas are suitable for grazing, and have been designated as such Livestock cannot be removed from Wilderness just because it is designated as Wilderness {This is ambiguous explain }

4 34 The respondent is concerned about the wording in Prescriptions 1.31 & 1.32, "livestock use would be resolved in favor of recreation," and suggests additional wording.

Thank you for your comment Your suggestion will be considered

4.35 The respondent is concerned about the suitability analysis for Prescription Areas 1.41 & 1.42.
These management prescriptions apply only to Alternative F These lands would be considered unsuitable for grazing in that alternative

4 36 Permittees need to be notified when mitigation is going to be initiated because of the Endangered Species Act or Natural Heritage Program

This statement is in reference to strategic monitoring of biodiversity, page V-5 This section of the Plan is about changes in the TES list, not mitigation measures We agree that the permittee should be notified of all mitigation measures that must be implemented.

4 37 Closing allotments limits future economic activity for the local community.

Allotment closures may limit economic activity of the local livestock industry and associated businesses, but at the same time they may increase economic activity in some other segment of the community

4 38 Base property values decrease when permitted numbers are reduced

It has been the position of the livestock industry that the difference between the price of the base property with a term grazing permit and the price of the same property without a term grazing permit is the value of the permit Thus a reduction in numbers would reduce the value of the property The Forest Service does not recognize a value for the permit, therefore land values should be without permitted numbers included

4.39 Where are "known impacts" discussed in evaluation, monitoring, and project planning?

"Known impacts" should be discussed in all NEPA documents in the environmental effects section

4 40 Clearcutting, grazing, and overuse affect topsoil, water, and quality of life.

We agree that these activities can affect soil and water resources if they are done improperly Large clearcuts are seldom necessary or currently desired and patch cuts can not exceed 40 acres

Grazing Standards and Guidelines have been developed to allow plants to meet their physiological requirements for growth and reproduction These grazing practices, as well as the implementation of other resource standards and guidelines, will not impair the long-term health of the ecosystem

4.41 The respondent would like Prescriptions 1.12 and 1 13 to include the statement that vacant allotments will be closed to grazing.

Grazing allotments within Wilderness may only be closed because of other documented resource conflicts Allotments cannot be closed to grazing just because they are in or partly in a Wilderness Area

4.42 Respondent suggests changes in the wording of various prescriptions, or changes in the prescriptions themselves

Thank you for your suggestions We will re-evaluate the prescriptions and your proposed changes to it

4 43 Manage by sound biological principles instead of "micro-management "

The Range monitoring section does not rely on any one tool to determine if desired conditions are being met A variety of tools--range condition, trend, utilization, stream-bank stability--are used to determine if desired conditions are being met A full range of management options (i e , time of grazing, pasture rotations, class of livestock, etc) are available to implement improved management

4.44 Respondents have suggested removing dead wood to allow livestock to graze in places they could not reach before.

Dead wood under heavy timber is generally not thick enough to limit livestock access Where there are limiting amounts of dead and woody debris, the forage amounts are generally low and not conducive to grazing However, catastrophic events such as large blowdown areas, fires, insects and disease outbreaks can put enough dead material on the ground to limit livestock distribution and the Forest tries to deal with these areas with firewood sales, etc.

4.45 Core areas, corridors, and winter range should be closed to livestock grazing.

Livestock grazing is determined by range-suitability analysis The core and corridor management prescriptions were developed by the Citizens Group, they determined that grazing in these areas would not be allowed Grazing strategies are to be implemented that will provide ample forage and habitat for wildlife winter range

4.46 How do you monitor and enforce grazing practices with no baseline data?

The implementation of Standards and Guidelines is a starting point for maintaining and improving range and riparian conditions As range analysis is completed for each allotment, baseline data are obtained to further improve management on these lands

4.47 Livestock grazing alters native forage, and overgrazing is a direct result of domestic livestock and not wildlife.

We agree that livestock grazing must be compatible with wildlife There are documented instances of wildlife overgrazing in the United States, however The Kaibab deer herd is one such example

4.48 The respondent has various concerns about the Term Grazing Permit process.

The Term Permit issuance process is not within the scope of this document

4.49 The land is still recovering from past activities.

The Cumulative Effects section will be improved in the final documents

4.50 The Forest should manage its rangelands to achieve the potential natural community as soon as possible.

The potential natural community is not always the condition that is wanted Chapter 1 of the proposed Forest Land Management Plan describes desired conditions

4.51 Permittees have concerns about road closures on allotments.

Permittees can use closed roads with written permission Reasons for allowing entry are to maintain improvements, construct new improvements, or remove a sick or injured animal that cannot be moved by horseback

4.52 Designation of big-game winter range is a priority.

Management prescriptions contain direction for management of specific areas, emphasizing a particular use Some uses may not be allowed, because of conflicts In the example of big-game winter range, livestock grazing is allowed, but must be managed to maintain and improve critical habitat for big game

4.53 There should be a minimum standard of AUMs.

Capacity determinations are based on range suitability in conjunction with the theme of each alternative A minimum level of AUM's would not be in compliance with developing alternatives without bias

4.54 Permittees should be involved in monitoring and analysis of the rangeland resource.

We agree

4 55 What is the rationale for livestock grazing within the 3.22 Limited Use Restoration Areas?

The 3 22 prescription was developed and provided by the Citizen's Group for Alternative F Their description of the prescription shows that grazing is allowed Any grazing in 3 22 areas will also comply with Forestwide standards and guidelines for grazing, riparian, etc

4.56 Will there be sufficient funds to implement the monitoring plan for the Forest Land Management Plan?

A portion of the Forest budget is set aside specifically for monitoring Forest plan implementation

4 57 Livestock use should be secondary to wildlife use.

Capacity determinations for grazing (domestic and wildlife) were based on the physiological requirements of grasses and forbs

Objectives for wildlife big-game herds are set by the State, and were given first consideration for capacity Herd objectives are currently being met on the forest, therefore the difference between herd objective AUMs and capacity AUMs was allocated to livestock

We anticipate no increase in livestock numbers under any alternative In fact, Alternatives A, E, and F would probably reduce livestock AUMs

4.58 Grazing pollutes water, and permits should not be issued.

It is the Forest Service's position that Section 401 of the Clean Water Act refers to pollutants discharged into waters of the United States from point sources of pollution In a letter dated May 31, 1995, the EPA suggested that permitting should be conducted in accordance with this interpretation until a judgement has been reached in litigation now before the United State District Court, District of Oregon (Oregon Natural Desert Ass'n vs Thomas)

4.59 The Forest must prevent irreversible damage of degraded rangelands.

The key to managing environmental effects is mitigation measures Measures derived from the Region's Watershed Conservation Practices and Riparian BE, as written in the Record of Decision for the Forest Plan, are effective in mitigating environmental effects before irreversible damage occurs Implementing these measures will cause stream and riparian health to improve steadily toward robust conditions

4.60 Grazing reduces the incidence of forest fires

We recognize that grazing consumes flashy fuels (grass), thus reducing the potential for wildfires In order to achieve that reduction, however, the productivity of the rangeland resource is generally impaired, which allows for erosion, tree invasion of the grasslands, and declines in forage production and range condition We are not advocating an elimination of grazing, but rather management of it within its sustainability

4.61 The respondent is concerned about the effect of grazing on the experience of persons visiting wilderness, as well as on TES species in wilderness

People's wilderness experience may be affected if they don't expect to encounter livestock Livestock, however, are allowed in Wilderness Areas by the Wilderness Act of 1964 They cannot be removed just because they are in wilderness, but they are not permitted to impact TES species--either inside or outside wilderness areas

4 62 The respondent is concerned about the effect of grazing on the Continental Divide National Scenic Trail, in terms of polluted water and trails damaged by livestock.

We are concerned too Thank you for your comments We will take this into consideration for the Plan and especially during the update of the Allotment Management Plans

4.63 The respondent is concerned about the effect of improper sheep grazing practices on tundra vegetation

Thank you for your comments regarding sheep grazing above timberline We will try to address your concerns in the final documents

4.64 Livestock/recreation conflicts are glossed over or not mentioned in the DEIS

Thank you for your comments We will try to address your concerns in the final documents

4.65 Permittees who violate Term Grazing Permit provisions should lose their permits
Thank you for your comment This is outside the scope of this document, however, permittees can and have lost portions or all of their Term Grazing Permit privileges for violations

4.67 How will the RGNF approach elk/livestock conflicts, and is it appropriate to handle them in the Forest plan?

Any conflicts should be handled at the Allotment Management Plan level If resolution is not possible through changes in livestock management, or if the problem encompasses a whole or major portion of a DAU, then resolution with Colorado Division of Wildlife on the desired number of wildlife in a particular area will be necessary

4.68 The Forest has not disclosed past and proposed activities, and the degree to which they have exacerbated the spread of exotic species on the Forest.

The Noxious Weeds section of the documents will be rewritten to improve the analysis and its readability

4.69 Other agents bring weed seed into the Forest, and recreational livestock from outside the valley do not have to abide by restrictions on weed-free feed.

The DEIS recognized that wildlife, wind, water, vehicles, equipment, birds, etc all have the potential to bring weed seed onto Forest lands All users of the Forest must abide by the weed-free-feed regulations

4.70 How is a noxious weed defined?

Noxious weeds are defined on Page 3-141 of the DEIS

5. Insects and Diseases

5.1 A balanced approach to managing the federal timber resources in the past several years has generally been lacking. We would like to see a return to a sustainable and adequate ASQ to benefit both small and large forest industry and in the end also benefit the overall health of all forest resources through sound management and stewardship. We think Alternative B is a step in this direction.

It is a goal of the Forest Plan to establish a sustainable ASQ However, the size of an "adequate" ASQ is a very subjective issue and means different things to different people The Rio Grande Forest Plan will attempt to establish an ASQ which will protect the resource for the future as well as satisfy the needs of Society for forest outputs including timber, recreation, water, forage, etc

5.2 I would like to see a different option than the one chosen for the Forest Service plan. I believe more timber can be cut and make a healthier forest than is being considered now

Although the "health of the forest" is a relative concept, the activities of the timber industry can indeed aid in the structuring of the forest so as to reduce the risk of widespread insect and disease outbreaks However, not all insect and disease activity constitutes a "forest health problem" Decisions to utilize harvesting so as to affect the condition of a forest stand must consider other resource values including the impact on other resources, the economic situations and the practicality of treatment In addition to harvesting, other silvicultural treatments including the use of prescribed burning may be appropriate

The Forest considered six alternatives in the DEIS The amount of land which allowed harvesting varied in the alternatives from 0-85% of the tentatively suitable timberlands These alternatives show that more timber can be harvested, but economics and finances have a great deal to do with the results The discussion of affects based on full and experienced budget levels was an attempt to show what could happen on the Forest versus what will likely occur based on historic Congressional funding

5.3 I don't believe the Rio Grande is healthy

The concept of a "healthy forest" is a relative one To some, a healthy forest is a young, sturdy plantation full of ponderosa saplings. To others, a healthy forest is a dark, old growth stand full of lichens and mushrooms The point is that it is necessary to define exactly what is meant by a healthy forest The function of a Forest Plan is to articulate what the future desired conditions are for the Rio Grande National Forest and then to go about achieving those goals through the use of management activities whenever practically possible

5 4 Because the RGNF forests are unhealthy, I believe there will be inevitable damage done to our forests that are neither tended or harvested

The forested lands which are found on the Rio Grande National Forest have been in existence for at least many millennia During this time, a number of insect and fungal organisms have evolved which are seen as detrimental to human goals and objectives While it is true that the activities of certain organisms may conflict with human activities, it is doubtful that without management input, forest functions would be permanently impaired

5.5 'the key is to offer a plan that will maintain a healthy forest and have all of its many uses being timber harvest, recreation, hunting, and beautiful country'.

We concur, the primary goal of the USDA Forest Service is to manage National Forest lands in such a way as to provide a variety of goods and services while maintaining the sustainability of the resource

5.6 'Also, it seems to me as I drive around the forest that the diseases are taking a toll on the trees. Wouldn't a better harvesting of the forest help prevent that?'

The organisms which cause disease in the trees of the Rio Grande National Forest are native to this area These disease agents play an important role in the recycling of nutrients and biomass in the forest ecosystem In certain cases, harvesting can be utilized to salvage materials that would otherwise be consumed by disease However, the constraints of accessibility and economics often preclude the harvesting of infested trees

5.7 I would hate to see a big fire or an bug kill.

In the past, large fires and large insect and disease outbreaks have occurred on the Rio Grande National Forest Current management practices attempt to circumvent these large scale events by diversifying the forest ecosystem into a mosaic of stocking levels, species mixes and age classes This technique serves to "spread the risk" of large scale outbreaks over time

5.8 This comment refers to the repeated mention of fire suppression as contributing to insect and disease problems. Commentor states that this is a convincing argument for more natural and prescribed fire

The exclusion of fire for the past 50 to 100 years in many western forests has created conditions which have contributed to outbreaks of insects and diseases While the re-introduction of fire into these ecosystems will eventually reduce the risk of insect and disease outbreak, it is not simply a matter of burning large expanses of forest in order to restore the natural balance The re-initiation of the fire cycles will be a long-term process which will have to proceed with caution Along with the judicious use of timber harvesting and the site disturbance resulting from harvesting, it is likely that fire will become an increasingly important tool with which to manage forest ecosystems

5.9 The use of the term "insidious" displays a narrow view of the role that insect/fungal disturbance plays in forested ecosystems.

The use of the term "insidious" was not meant to be a value judgment Webster's New World Dictionary, College Editions, gives a definition of insidious as "operating in a slow or not easily apparent manner" Although certain disturbance events such as a bark beetle outbreak could not be considered "slow or not easily apparent", many other insect disturbances, and certainly almost all fungal activity is not easily apparent nor does it occur rapidly

5.10 Insects provide an important function and link in the forest ecosystem, as well as provide an important food source for wildlife Therefore, they should be managed with this importance role in mind. Their role in creating habitat conditions and attributes that are important to wildlife species, such as the woodpeckers and "old growth" forest species, should be considered critical in the face of poor current information on the relationships The draft EIS recognizes this function, and states in several places the importance of insects to the ecosystem and wildlife. However, most of the specific management standards, guidelines, or analysis details do not explain how this importance will be reflected in the management approach. More details on how this importance will be demonstrated in the management philosophy and planning would be desirable. Management direction should be clear on when and how insects and disease management will be undertaken without merchantable tree protection as the main priority. Can we assume that all prescriptions other than 5.11 and 5.13 will allow insects and disease processes to naturally occur?

Forest managers do recognize the importance of insects as a food source and habitat for many species of wildlife There are specific guidelines which dictate the maintenance of "wildlife trees" in areas under management The majority of the landbase within the Rio Grande National Forest will be allowed to function under natural processes, with only 14% of the Forest being classified under the "commercial timber land" categories However, establishing more stringent guidelines concerning insect and disease management is a self-defeating proposition Since the concept of "Forest Health" is relative, how is it possible to pre-determine what "level" or "units" of "Forest Health" are desired? Decisions whether to treat or not treat insect and disease situations are relatively complex concerning a number of issues It is the philosophy of ecosystem management that must be our touchstone

5 11 We need to give more consideration to maintaining, increasing, and restoring natural biotic enemies of these pests (bats, birds, rodents, insects) to provide their "check" on outbreaks of insect/disease cycles.

Again, natural processes will be the dominant management option on these lands (See also Rick 26)

5 12 The Rio Grande National Forest should consider/evaluate providing a time buffer protection on newly infested bug sites. Some researchers have suggested that the importance of bug killed areas (for birds) may be most critical for the first 3 - 5 years. Can this management approach to these stands be useful on the Rio Grande National Forest?

In order to retrieve any value from harvesting insect infested timber, it is imperative that harvesting occur as soon as possible Due to the action of decay fungi and boring insects, dead trees begins to degrade rapidly following death A 'time buffer' would result in loss of value which would render the harvesting process useless

5.13 **Timber harvest effects should include an evaluation of the potential impacts to the local wildlife populations, in addition to the other issues mentioned in the first paragraph on p. 3-190**

Timber harvest plans do evaluate the effects of harvesting upon local wildlife populations

5 14 **The assessment of effects on wildlife, p. 3-191, is weak It focuses on forage production or loss of cover. The effects of management activities on wildlife populations is potentially very complicated What is the relationship of these events to wildlife populations? Many species are key players in this issue, and little is known about the relationship of wildlife, and other insects**

"The effects of management activities is potentially very complicated " "little is known about the relationship of wildlife, and other insects " The Rio Grande Forest Plan must reflect the current state of knowledge As the commentor has noted, an understanding of the complex relationships between insect populations and specific wildlife species is generally lacking Although much research is needed in this critical areas, an ecological approach to management issues attempts to recognize the importance of these relationships

5.15 **The forest ecologist and/or wildlife biologist should be involved with the Insect and Disease evaluations.**

Insect and disease evaluations attempt to consider all of the critical elements with regards to the stand or situation in question In a number of cases, wildlife specialists are consulted for their expertise on forest and tree health issues In addition, formal Service Trip Reports are filed in local District offices

5 16 **Referring to pg. 3-178· Fire suppression and harvesting practices should be altered to maintain all species including pest populations at their natural level.**

In general, both fire susceptibility and risk of insect and disease outbreak have fluctuated (often dramatically) through time It is difficult to determine the "natural level" of a huge range of species, but an ecological approach to management attempts to maintain species at population levels within a natural range of variation

5.17 **It appears that insect and disease problems can be reduced to range of natural variability by altered fire management and logging.**

It is true that silvicultural techniques such as prescribed fire and logging can address specific forest health issues Other factors which must be considered include economics, accessibility, and impacts upon other resources

5.18 **The "Preferred Alternative" proposes to lock up from management large areas of the forest. Timber harvest would be allowed on 11.9% of the forest while up to 41.1% or 756,000 acres, could be managed. Are you really willing to sacrifice nearly 30% of the forest component suitable for timber management to be potentially ravaged by insects, disease and catastrophic fire? I urge you to rethink this. Nearly 60% of the forest is already set aside and not eligible for timber management. We do not need to place more public ground into de facto wilderness**

While 41% of the Rio Grande National Forest landbase is classified as potentially being suitable for timber management, it is not true that the remaining 60% is 'set aside' nor is it all forested The remaining 60% includes recreation areas, grass and forage lands, water courses, and many other areas unsuitable for timber management While some lands which could support timber management have been excluded from the timber base in the Rio Grande Forest Plan, it is highly doubtful that all or even a major proportion of

this land will be ravaged by insects, disease or fire The majority of lands within the Tentatively Suitable Timberlands, the referenced 756,000 acres, was not allocated to the suitable and scheduled for harvesting because the costs of harvesting greatly out way the revenues While the respondent couches the argument as a forest health issue, the situation is just as much a forest economics or Congressional budgetary situation which are mostly outside the scope and decisions of the Forest Plan

5.19 Is it not true that mature trees are subject to major insect and disease damage? And are not mature forests much more subject to fires?

Throughout the life of a tree, there are many factors which can cause tree mortality Seedlings, saplings, poles and young trees are all subject to insects and disease It is obvious that all of the young seedlings which sprout from a single pine cone will not reach old age, there are a great many factors which cause a natural reduction in the numbers of trees Humans tend to focus on the mortality occurring in older or 'mature' trees because they appear 'more dramatic' (i e a dying 25 inch pine is more noticeable than a seedling) Another factor is that over the course of a lifetime, trees 'accumulate' stresses and injuries Over time these injuries take a toll on the health of a given tree While it is true that fuel levels tend to build over time, many mature forests have become established under a regime of periodic fires In these stands, the fire is frequent, but burn cooler and less intensely It is difficult to say that 'mature forests' are 'much more subject to fires'

5.20 This section I see no mention of the crisis situation from insect devastation that has been pronounced by the Rio Grande County Commissioners and the late Wilo Pleasent. I must therefore assume the Rio Grande National Forest does not have conditions that are out of the range of natural variability.

The Insect and Disease work group in Gunnison is unaware that a crisis situation with regards to forest insect outbreaks has been declared by the Rio Grande County Commissioners. We do not believe that the current conditions are outside the range of natural variability

5.21 I believe that you have a forest health time bomb on your hands, similar to the current situation in eastern Oregon and Washington. Yet you do not address this problem very well in any of your alternatives (i.e. only up to 14% of the land base suitable for harvesting will be harvested; while 41% is available)

The situation which occurred in eastern Oregon and Washington was very different than the current situation found on the Rio Grande National Fores The current situation on the Forest is different because of the type of infestation, the magnitude of the infestation, and the spatial arrangement of damage

The greatest basic difference is because the Rio Grande National Forest has such a large component of Spruce/Fir type This timber type is much more resistant to western spruce budworm defoliation when compared to the Douglas-fir/True Fir timber type found in Oregon and Washington (as well as at the lower elevations of the Rio Grande National Forest)

The exclusion of fire for the past 50-100 years in the Spruce/Fir type has not had as pronounced an effect as in the Douglas-fir/True Fir type simply because fire is not as common an event at these higher elevations

5.15 'I only hope that you will develop an alternative that addresses the forest health issue; allows for an ASQ of 30-40 MMBF; and does not create any more wilderness (i.e. 23% of land area is enough).

The forest health of the Rio Grande National Forest is of major concern to the USFS We attempt to maintain the Forest in such a condition so as to preserve the resource

Wilderness recommendations vary by alternative and the development of the Final Revised Forest Plan and FEIS will take your comments into consideration

5.22 **"cutting back timber harvesting" would also "create a degenerating forest which will create future hazards (fire, insects, disease, vegetative failures, declines in major game species)."**

Forest Health issues are only one portion of a number of considerations which constitute a decision regarding the timber suitable land base Although timber harvesting can have significant impacts with regards to affecting forest health, there are other management techniques (including prescribed fire) by which forest health can be affected Economic concerns and accessibility are also major considerations Although timber harvesting can have positive influences upon forest health, it must be remembered that these forests have existed for many hundreds, if not thousands, of years A lack of management inputs may indeed reduce the long term value of many stands for human purposes, but it is difficult to say that reduced management will result in a degenerated forest

5.23 **There is currently much rhetoric in the local news media about the mismanagement of the forests with appeals for rapid action to see that forest health is restored via salvage timber sales. The perception of a crisis has been created by many politicians, industrialists, and federal forest managers There is no clear scientific basis for these arguments Management alternatives and unknowns have not been identified and presented as part of the public debate on the issue. Until this is done, the existing campaign only serves to mislead an increasingly bewildered public The forest plan revision process must thoroughly address this important issue and disclose to the public what is known and unknown and how forest-wide and project level salvage logging decisions will be made in the future.**

There is much evidence that fuel loads in many forest stands throughout the western United States are currently at historically unprecedented levels Although 'Forest Health" is a relative concept, much of the concern expressed over this issue has to do with the risk of large scale fires and insect disease outbreak as a result of 50 to 100 years of fire exclusion Because "Forest Health" is a relative concept, it is difficult to prescribe absolute guidelines about what level of "Forest Health" is desired The basic goal of fire and insect and disease management is to prevent catastrophic events which would decrease the sustainability of the resource By taking an ecological approach to forest management, the suitability of undertaking a given management activity must be examined on a case-by-case basis

5.24 **The many unknowns about the environmental effects of forest health and salvage treatments require that the Rio Grande National Forest use an accountable, adaptive approach to management. Management should be performed as an experiment on a limited scale, monitored, and evaluated to guide appropriate and effective management direction in the future. We recommend that this approach be included in the Final Revised Plan.**

The process of producing a timber harvest plan requires that each harvesting activity is treated as a unique project The NEPA process compels participants to record all stages of the process as well as to adhere to specific steps and rules Monitoring requirements as well as guidelines and standards ensure that harvesting is later followed up with final analysis and redress of specific issues if necessary

5.25 **Recognition that forest health is in decline, and a definitive method to monitor and evaluate change in forest health;**

There are several techniques by which forest health is monitored on the Rio Grande National Forest In addition to specific site visits by forest health specialists, aerial surveys have been conducted in the past With growing concern over forest conditions these "as needed" aerial surveys will become a periodic event in addition to surveys done upon request There is also a series of permanent plots on the Rio Grande National Forest which were established as part of the National Forest Health Monitoring Program These permanent plots will be visited and sampled at periodic intervals to help gauge the condition of forest stands The findings of these monitoring activities are reported annually in the "Forest Insect and Disease Conditions Report" This publication is produced by the USFS Rocky Mountain Regional Office and is concerned with a number of

topics regarding forest health issues throughout the Rocky Mountains, including the Rio Grande National Forest

5.26 **'If Forest health were the only issue, the ASQ might be much higher in order to 'minimize serious or long-lasting hazards of insect and disease infestations and wildlife.'**

"If Forest Health were the only issue, the ASQ might be much higher" There are a number of factors which influence the ASQ including Forest Health However, the final determination of ASQ involves a good many factors in addition to Forest Health, including economics, disturbances to watersheds, water quality, the costs of new roads, the costs of EISs and litigation, wildlife impacts, etc

5 27 ***Regarding Net productive capacity. Wouldn't aging forests increase their rate of mortality? Wouldn't stand consuming fires reduce productivity?***

Actually, in terms of numbers of trees killed, mortality is greatest when trees are young However, if you are discussing mortality in terms of biomass, it is true that the death of older trees result in the mortality of greater amounts of biomass With regards to the issue of 'fires reducing productivity', it is necessary to define productivity While it is obvious that a burnt tree will not produce living biomass, a young stand which follows a fire event may eventually exceed the 'productivity' of an older stand

5.28 **Our confusion about Chapter 3 stems from the absence of a discussion on the forest health issue. The ecological resource section (3-5 to 141) discusses the "key components of stability: "T & E species, fragmentation and connectivity, species viability, old growth, etc." What about Forest Health? The Biodiversity Assessment (Section 3-22) discusses the "key components of sustainability" using 1) Fine-filter, 2) Course filter and 3) Range of Natural Variability (RNV). The RNV assessment should have identified forest health as a concern. The Biodiversity Assessment does not *acknowledge that forest health is in need of management. Therefore the alternative* development is inadequate. If the RNV discussion had properly identified the consequences of the currently declining forest health, the affect would be, "strong enough to evoke a reaction". The logical thought process of problem solving, (3-1) "...to describe the environment of the Forest and disclose the alternatives," suffers from the omission of the forest health issue. The logical development of actions and alternatives would respond to the changing forest if it were introduced early.**

The issue which you have identified as "Forest Health" has been adequately covered in Chapter 3 of the DEIS under the headings "Forest Insects and Disease" and "Fire and Fuels Management" (Please see pages 3-178 through 3-202) In these sections you will find discussions of the impacts of fire and other natural disturbances such as insect outbreaks and disease epidemics Management options regarding these events are discussed as well

5.29 **'the public needs to know how much change in timber harvests will occur if the new management scheme is adopted'. 'knowing that dense stands with overmature, large diameter, Engelmann spruce trees are susceptible to spruce beetle attack *(Alexander, 1986) what are the risks to forest health if more land is placed in the SF5* land type?"**

Although large diameter Engelmann spruce are at greater risk to spruce beetle attack, this risk is relative to the risk to smaller spruce However, the vast majority of spruce beetle outbreaks occur as a result of some other impact upon stand conditions, such as wind throw (Schmid and Mata, 1996) In any case, prudent management of spruce stands dictates the removal of wind thrown or otherwise damaged trees regardless of the size of the residual stand However, in many cases, treatment of an infested or 'at risk' stand may be impractical or uneconomical In such situations, managers are left with little option than to let natural processes take their course

5.30 **'Mortality is not discussed in relation to old growth. Information in the Rio Grande's Resource Information System data base shows one-fifth of the last successional stands have a net growth of zero or less. That means that one in five late**

successional stands has so much mortality that it is the same as net growth or that there is so much mortality it is more than growth. This indicates an unhealthy forest condition which is not addressed in the DEIS "

Stands which have net growth of zero or less are not inherently unhealthy Another way of putting it would be to say that the stands have reached an equilibrium

5.31 **"how much fire and insect risk is the Forest Service managing for?'**

In all cases, the Forest Service attempts to reduce the risk of catastrophic disturbance as much as is practically possible Application of the principles of ecosystem management which attempts to maintain a diversity of habitat conditions within the range of natural variability is a major component of the effort to reduce risk of large-scale, widespread disturbance

5.32 **"Pest populations are unnaturally high, largely due to fire suppression and harvesting practices. Several Forest landscapes contain late successional single-species stands susceptible to insect and disease attack " is on page 22 of the DEIS. This statement indicates harvest practices have caused pest populations to climb. With only 7.7 per cent of the entire forest showing any impact from timber harvest it is hard to understand how harvesting practices could have impacted pest populations very much Perhaps it should be stated that the lack of harvest and fire suppression have enabled the forest to move to late-successional single-species stands. Harvest can and should be a tool to promote forest health. There is no consideration in this plan for precommercial thinning that could be done on lodgepole stands and which could reduce the risk of bark beetles and fire.**

Actually, the interpretation of 7 7 percent of the Forest's land base "showing any impact from timber harvest" is incorrect This figure actually refers to the US Forest Service having records of timber harvesting on 7 7 percent of the Forest's land base This does not include activities (including harvesting, grazing, and deliberately set fires) which occurred prior to Federal consolidation of these lands Many stands on what is now the Rio Grande National Forest were extensively high-graded, and these actions in conjunction with fire exclusion are responsible for many of the current stand conditions

5.33 **High populations of pest populations (DEIS p 22), erosive soils that may be permanently and irreversibly damaged from a large catastrophic fire, and the increasing probability of a high-intensity fire or insect and disease epidemic (DEIS p 3-133) are indications that Forest Health is an issue not to be taken for granted on the Rio Grande.**

Forest health is an issue which is not being taken for granted on the Rio Grande National Forest The probability of large scale events occurring in the forest increases simply with the passage of time This situation has been exacerbated by fire exclusion for the past 50 years To address some of the issues which are perceived as forest health problems will necessarily be a long-term process

5.34 **"Potential exists throughout most Forest cover types for large-scale infestations, especially from western spruce budworm, dwarf mistletoe, and root diseases DEIS 3-178. It is recognized that increasing the diversity of forest stands will decrease the risk that any one insect or disease will cause large-scale damage The problem is the definition of increasing diversity. To the Rio Grande National Forest ID team, increasing diversity must mean let the forest continue under the forces of nature. To others it means regulating more of the forest and harvesting to benefit the age class distribution of the forest**

While increasing forest stand diversity will tend to reduce the risk of large-scale disturbance, management of these stands is not solely a forest health issue A number of other factors including economic considerations, impacts on other resource values and practicality of treatment also weigh heavily in the decision to treat stands

5.35 **In the Forest Insect and Disease portion of the DEIS many references are made to natural succession and how it takes care of insects and disease. Yet the DEIS indicates the forest is not healthy. It is also stated that harvest can mimic the *controls of natural succession. Why isn't harvest considered more strongly to bring* this over-aged forest back to good health?**

Forest health is only one consideration when planning timber sales Accessibility, economics and other resource values are also important inputs to the process In addition, although the effects of harvesting a stand of timber is similar in many ways to the effects of fire, the two processes are not identical and differ in a number of ways

5.37 **The natural processes that have been occurring on the 93% of the Rio Grande not impacted by human activities have resulted in high pest populations and a real threat of a large catastrophic fire. It is time the Forest Service looked seriously at some alternatives other than these natural processes to improve Forest Health for the future and the present.**

It is grossly inaccurate to say that human activities have affected only 7% of the Rio Grande National Forest landbase Timber harvesting has occurred on about 14% of the Forest Grazing has occurred on 50-80% Appendix A of the EIS describes all the historic disturbances on the Forest

5 38 **The preferred scenario will result in an impoverished and depopulating area with the forest in catastrophic flames. This is in direct contradiction to Forestwide Objectives Series 3 and 6**

Even if timber management were to be intensively practiced on all of the potential timber landbase, there would still be 60% of the Forest which would not be suitable for timber management activities While some lands which could support timber management have been excluded from the timber base in the Rio Grande Forest Plan, it is highly doubtful that all or even a major proportion of this land will be ravaged by insects, disease or fire

5.39 **A healthy forest is essential for all, but this cannot be obtained by leaving large areas untreated, closed or in accessible.**

The Rio Grande National Forest was essentially untreated for long periods of time prior to the advent of European settlement Since that time a major influence on the Forest has been the exclusion of fire. Allowing large scale disturbance to occur once again will return the Forest to primeval conditions

5.40 **Suggestions: 6) Carefully restore some of the lost ponderosa pinery by weeding out the shade-tolerant growth, eliminating all slash and dead fuel loading to replicate the proper form of the historic LTA, then use prescribed fire to keep the stands right. Only about 10% of the few existing ponderosa on the Forest are mature or older (3-24).**

These are some excellent suggestions to restore ponderosa pine stands on the Rio Grande National Forest to conditions which were more common prior to the advent of European settlement Other important considerations are the economics of attempting such intensive silvicultural manipulations as well as the impact of these activities on other resource values

5.41 **I am concerned for the health of the forest and believe that through proper forest management, we can revitalize our national forest As you are well aware, forest fires cost the states and federal government millions of dollars every year. In recent years, the cost in human life has been high too, with several fire fighters losing their lives while fighting fires, such as the Storm King Mountain fire.**

We agree that proper forest management can improve the condition of the Forest The issues surrounding fire and forest health are problematic. Although it is increasingly clear that fires need to play a greater role in the forest ecosystem, human improvements such as summer homes and campgrounds make the widespread re-introduction of fire difficult, if

not impossible The unprecedented high fuel loads that are currently present in the forest ecosystem have taken a long time to build up and will take an equally long time to correct

5.42 **I believe that the timber industry, with careful oversight, can contribute to a partnership by treating the forests, removing the unhealthy trees, thinning where necessary, and improving the health and vitality of the forest I believe this is a better approach than to wait for the insects diseases and fires to take over.**

We agree that timber harvesting is an important component of maintaining a healthy forest However, this approach is applicable only where harvesting activities can be conducted safely and where the economic situation is conducive to harvesting Frequently, sites which could be harvested to improve stand vigor and growth are simply inaccessible or would have to be conducted at negative financial return Based on the Federal deficit and Congressional budget patterns, the Forest won't be doing too many of these type projects

5.43 **The map on p. 3-188 shows almost the entire forested area of the Rio Grande National Forest as having high potential for infestation by spruce budworm. This is wrong because the budworm only affects shade tolerant trees; it does not affect ponderosa and lodgepole pines.**

Although it is true that western spruce budworm will feed preferentially on Douglas-fir and other true firs, these tree species are frequently found in stands which are dominated by other non-host species The diagram you refer to points out that these shade tolerant species constitute a substantial proportion of stands on the Rio Grande National Forest, and potential hosts are present even on sites dominated by non-host species

5.44 **The discussion of how dwarf-mistletoe-infected trees become more fire-prone on p. 3-179 is also wrong. We fail to see how witches' brooms make a tree more likely to burn, as the brooms are seldom near the ground. But fires will not burn unless there is sufficient fuel on the ground. It is thus highly unlikely that fire sanitizes stands by killing only or mainly mistletoe infected trees.**

Mistletoe brooms make it much easier for a low-level fire to reach the crown level of a stand Dwarf mistletoe brooms are predominantly found in the lower third of the crown of a host In addition, the high flammability of these brooms increase the intensity of these fires The relationship between fire and mistletoe is well-established The exclusion of fire from the forest ecosystem has created conditions which have allowed dwarf mistletoe to exceed the range of historic variability to the point where the number of mistletoe infested stands is greater than has occurred in the past (Zimmerman and Laven, 1984)

5.45 **There are no studies cited to support the assertion on p. 3-180 that uneven -aged management "will exacerbate the disease problems since stumps left behind after harvesting will serve as inoculum (a food source) for the fungal organisms". If this is true, won't it be even more true for even-aged management because the latter leaves more stumps?**

It is well documented that leaving stumps in a root disease "center" will allow the disease organism to build up on the stumps While it is true that this is true in both even-aged and uneven-aged silvicultural systems, the even-aged system allows a stand to convert to another, more tolerant species An uneven-aged prescription in a root disease infected stand serves to perpetuate the disease in the stand, while the even-aged prescription can break the cycle of re-infection (Petersen, 1989)

5.46 **On p. 3-189, it states: "dwarf mistletoe is never a problem in Engelmann spruce", yet the table on p. 3-183 shows some occurrence of mistletoe in spruce stands.**

While it is true that Engelmann spruce is not a host of dwarf mistletoe, the table refers to other tree species within predominantly Engelmann spruce stands In a mixed stand of

Engelmann spruce and Douglas-fir, the Douglas-fir can be heavily infected and thus give an "Engelmann spruce stand" a high mistletoe rating

5.47 **Fire can damage ponderosa pine trees (p. 3-190), but such fires kill smaller trees, thus making it less likely that bark beetles will be a problem, since ponderosa pine grows in low density park-like stands if regular fire occurs.**

I am not sure of the point being made here While it is true that frequent fires in pine stands will tend to reduce the activity of bark beetles, it is also true that bark beetles and fire have a symbiotic relationship and that bark beetle activity has long been an intrinsic part of the pine forest ecosystem

5.48 **The proposed reductions in the timber sale program under the Experienced Budget level of the Preferred Alternative are not only unnecessary, but contrasts sharply with the apparent management needs on the Rio Grande National Forest Statements such as the following suggest inherent problems of not managing the forest, and at the same time suggest significant potential benefits to the forest itself from a forest management program.**

`.. the Forest is probably seeing a landscape nearing a peak of late-successional forest." DEIS 3-39.

'Over the last several decades, susceptibility to budworm outbreaks has increased in the Rio Grande National Forest." DEIS A-39

"The majority of the Rio Grande National Forest's forest acreage is late-successional forest. In the future, as the acres of older forests increases, there could be an increased incidence of high-intensity fires or insect and disease epidemics." DEIS 3-139.

"By increasing the diversity of forest stands, we decrease the risk that any one insect or disease will cause large-scale damage." *DEIS 3-178.*

If the above statements are a correct assessment of trends on the Rio Grande National Forest, then the Forest has not lived up to its responsibilities of forest management in the Preferred Alternative.

The above statements are not value judgments The probability that the Forest is nearing a late-successional stage is essentially a natural process, in spite of the fact that these changes have probably been accelerated by the exclusion of fire and other management activities (including some harvesting) since the advent of European settlement By definition, as the forest increasingly approaches late successional stages, there will be an increased possibility of disturbance which will return stand conditions to an earlier seral stage Forest management is not simply 'managing Forest Health', but instead must consider a myriad of factors including economics, other resource values and simple practicality

6. Fire

6.1 **The Forest should complete a thorough fire-history study or analysis, conducted by credentialed professionals, in order to accurately determine forest health issues**

Survey and analysis needs are addressed in the DEIS, pp 3-194 thru 3-197

Use of the research findings of Crane, Heinselman, Romme, and the Fire Effects Information System is sufficient for Forest-level program analysis Also, fire-history studies

by "credentialed professionals" of the entire forest would be cost-prohibitive and take several years

These studies will be considered on a project-level basis, however, after evaluation of the cover type or LTA for fire-resiliency needs These will be described in the FEIS through prioritization of analysis and evaluation sites.

6.2 **The Forest needs to acknowledge and address the effects of the fire suppression program on ecosystem dynamics, by implementing a more aggressive prescribed-fire program, both management-ignited and natural. Program direction for these prescribed fires should be for fuel hazard reduction, restoration of fire's natural role, or other ecosystem/management needs**

The increase in Management-Ignited Fire (MIF) from the historical average of 500 acres/year to our planned level of 1,500-4,000 acres/year (DEIS, pg 3-198) shows the Forests' commitment to more use of fire as a management tool for addressing ecosystem needs

Forest and Management Area Desired Future Conditions, Goals and Objectives, and Standards & Guidelines will be improved/revised, where appropriate, to address FSM 5140 3, requirements for Prescribed Natural Fire implementation

6.3 **The Forest needs to acknowledge and address the aging, higher-biomass conditions in the forest, with their associated potential for large fires and threat to resources and values, through increased utilization of various timber harvest programs (timber sales, public fuelwood), rather than allowing them to be burned in a wildfire, PNF, or MIF**

Large catastrophic fires and the reduction of their potential for occurrence are addressed in the DEIS and DFPR via identification of the area's fire regime (DEIS, pp 3-41 thru 3-74) This indicates the role natural fires played in either maintaining an ecosystem (high-frequency, low-intensity fires in the low- to mid-elevation sites) or initiating an ecosystem (low-frequency, high-intensity fires in high-elevation sites)

This determines whether to address potential large-fire occurrence as an "unnatural" event for which mitigation steps need be taken (i e , commercial or pre-commercial thinning prior to prescribed burning), or as an inevitable natural event which is critical to the ecosystems' renewal We attempt not so much to prevent fire, which we probably could not and should not do, as to identify values that would be threatened by fire

The DEIS (pp 3-192), Forestwide Objective 7 7, Forestwide Desired Condition - Fire, as well as 36 CFR Ch II 219 27 and FSM 5102, 5110, and 5138 1, all address protection of relative resource values The FEIS will improve or incorporate references to use of pre-commercial or commercial thinning and public fuelwood gathering as effective fuels-treatment options

6.4. **What policy change allows fire to burn uncontrolled, and what are the criteria used to address soil and watershed protection?**

Direction for development of Prescribed Natural Fire Burn Plans is contained in FSM 5142 2 and 5142 21 Project-specific monitoring and evaluation requirements (i e , soil & water impact mitigation measures) are contained in these Plans

6.5 **To what degree do recreational activities increase fire risk on the RGNF?**

The more people out in the forest, the higher the risk of accidental fires A better analysis of this relationship will be expanded in the FEIS

6.6 Natural-fuel management should not be "make-work" for fire and fuels personnel in the absence of "activity" fuels.

This shift in emphasis is not "make-work " The amount of projected acres managed for natural-fuel treatment stays the same regardless of the alternative Additional risk created by increased activities fuels will simply direct us to emphasize our work where we're most needed

6.7 Why is there no variance in the numbers of acres of fuel treatment by alternative?

The section referred to in Table S-2 (Activities, Outcomes, and Effects) should specify Natural Fuels Treatment These are the acres of low- to mid-elevation cover types which have been prioritized for treatment with natural-fuel monies, and will not change by alternative.

6.8 The effect of timber harvesting on fire danger is not adequately shown.

The FEIS will address this more thoroughly on a programmatic level, but it should be noted that project-level analysis is inappropriate in the Forest Plan evaluation

6.9 The Forest needs to add language about grazing as an appropriate and effective method of fire hazard reduction

The FEIS and FLRMP will address appropriate means of fire hazard reduction, on a programmatic level, based on ecosystem needs and values at risk Grazing will be included in this discussion

6.10 Will the risks of wildfire increase for intensively managed landscapes if they mimic the fuel profiles of roadless and wilderness areas?

The determination of wildfire risks is based on ecosystem needs and values at risk, not whether an area matches a roadless or wilderness area fuel profile

6.11 Wouldn't stand-consuming fires reduce net productivity and create barriers to native species' use of habitat?

The concern on "stand-consuming" fires at the exclusion of the other types of fire ignores the bigger picture we are attempting to create

First, we must determine whether a "stand-consuming" fire is part of the natural fire regime of the ecosystem/LTA (DEIS, pp 3-41 thru 3-74) If not, steps will be taken to mitigate the situation through various fuel-management procedures (thinning, fuelwood, burning, etc)

If "stand-consuming" fires (more appropriately termed "stand-initiation fires") are determined to be part of the natural ecosystem dynamics, we will not attempt to keep them from ever happening Not only is it impossible, this would be counter to ecosystem-management practices, because in the long term such fires maintain or increase net productivity

Additionally, since not all native-species habitat is centered on late-successional cover types, the habitat created through the natural post-fire successional stages would actually could create more needed diversity and habitat The FEIS and FLRMP will address this via a "fire-maintained ecosystem" and "fire-initiated ecosystem" discussion

6.12 The scale of proposed prescribed-fire activities need to be made clear to the public in the planning documents

The scale of the proposed prescribed-fire program for the Forest is mentioned, both specifically and generally in Chapter 3 of the EIS and RMP Additionally, we will meet project-specific NEPA requirements regarding public notification

6.13 The DEIS states (on pg 3-192): "It is felt wildfire occurrence and acreage will remain within historic (past 20 years) range." A feeling is a totally inadequate approach to forest health and biological-diversity management

We will change the "It is felt " statement to reflect the fact that the vast majority of fires on the RGNF are lightning-caused and their occurrence will likely remain within historic norms, since there is no method for predicting lightning occurrence on a yearly or per-decade basis "Acreage" will be dropped from the statement and discussed in the Environmental Consequences section

6.14 In light of the 1992 study (Romme et al.) on the San Juan NF which found a fire-return interval of 7-25 years in ponderosa pine, the fire-processes description in the RGNF DEIS (pg 3-56) should be updated to reflect the drier, less fuel-producing conditions and subsequent longer return intervals

The relationship between a site's dryness, its fuel-producing capabilities, and its fire-return interval is not necessarily a direct, linear type of progression The types of fuels produced and their properties that influence fire behavior (chemical composition, size, etc) are the most critical element In fact, drier sites will often have a shorter return interval because the fuels produced have evolved under this frequent-fire regime, and it is critical to the site's maintenance

Also, it must be recognized that the fire-processes description in the RGNF EIS was a programmatic, not project, development tool, using multi-species LTA descriptors (ponderosa pine and Douglas-fir), and a wide variance in intervals is acceptable The results of the Romme et al study will be summarized and added to the LTA 5 description with the added note that this study was predominantly in a ponderosa pine--gambel oak type, of which there is little, if any, on the RGNF

6.15 It appears that insects and disease can be brought back into the range of natural variability by altering fire suppression...practices to more natural levels

Although defining "natural fire suppression level" is tricky at best, we believe this concern is addressed via the development of Prescribed Natural Fire plans on the RGNF, as described in various Management Area Goals and Objectives and Standards and Guidelines

Also, a Forestwide Goal and Objective will be developed for the final LRMP which addresses this concern But it must be noted that we will not simply alter fire suppression practices before we consider public and firefighter safety, ecosystem needs, and values at risk on a case-by-case basis

6.16 Natural-fuel increases (indicated by climatic trends of wetter and warmer), combined with current fire suppression practices, are creating a system exceeding the bounds of natural variability.

The development of Prescribed Natural Fire Burn Plans described in various Management Area Goals and Objectives, and Standards and Guidelines, plus a Forestwide Goal and Objective to be included in the Final RGNF LRMP, will address this concern

6 17 The statement in Forestwide Desired Conditions - Fire, pg I-2, ". .will be consistent with historic fire regimes and land uses," should include recent history as well

This concern appears to be caused by the way sentence is structured We will change it to. " will be consistent with land uses and historic fire regimes "

6.18 The ecological consequences of suppressing natural fires for fire-associated communities and T & E species must be fully addressed in the Forest Plan Revision

This concern is addressed in the DEIS, pp 3-193, 3-194, 3-196, 3-197, and 3-198 thru 3-201, also Forestwide Desired Condition pg I-2, and various Management Area Objectives, Goals, and Standards and Guides Additional items in the FEIS and Final LRMP will further direct the program to address this issue

6.19 The paragraph on fire in DEIS pg. 3-69 is mistakenly repeated from pg 3-67

The paragraph regarding Fire Processes on pg 3-69 will be changed to read "Not applicable for this LTA "

6.20 How can a program of "ecosystem restoration," which must involve restoring the role of natural fire, co-exist with new range improvements?

Range improvements will be mapped and identified as to type of improvement, and this information will shared with fire management personnel Before either a Management-Ignited Fire or a Prescribed Natural Fire is initiated, the potential hazard to these improvements will be mitigated This hazard-mitigation requirement is contained in FSM 5140.

6 21 Why is the site-nutrient loss associated with Whole Tree Harvest determined to be unacceptable, yet the loss from prescribed fire considered acceptable?

With WTH, none of the nutrients contained in the fine fuels (needles and small twigs) would remain for use by the stand With prescribed burning, some loss does occur, but some nutrients in the burned materials are returned to the soil

Other positive, indirect effects are short-term increased nutrient availability, raise in pH and release of cations, and encouragement of microbial activity This is particularly true of lower-intensity Management-Ignited Fire and is also a critical concern when managing fire-maintained ecosystems

6.22 The analysis fails to explain how and why catastrophic fires would be more unlikely under Alternative F (DEIS, pg. 3-170)

In the section cited by the respondent, there is no prediction of an increase or reduction in the potential for catastrophic fires

6.23 The statements contained in the DEIS that insects, diseases, and fires have occurred naturally and will continue to "occur without interference," and the other statements that say these occurrences will take the Forest outside the range of natural variability, are mixed messages

What appears to be a mixed message is partially caused by taking the "outside the range of natural variability" statement out of context The entire statement addresses the effects of fire suppression on natural fuels, and explains that to let insects, diseases, and fire "occur without interference" without first evaluating the current RNV status of a given area could cause a natural event to throw the Forest even farther out of RNV

The phrase "occur without interference" in Desired Condition or Objective statements will be changed to "with minimal interference" or something similar

7. Wildlife, TES, Viability, Fragmentation, Connectivity

7.1 The standardized road density of 6 miles/square mile used to suggest potential impairment of species movement is too high. The more appropriate values suggested were either 0.5 or 1 mile/square mile Want to know the location of those areas that have densities in excess of 6 miles/square mile. Road densities are highly concentrated in some parts of the Forest and there needs to be an effort taken to reduce the densities in these areas.

We agree and will change how the road density is analyzed by incorporating the technique called "moving window analysis" that is used in assessing the suitability of grizzly bear habitat This technique will add a spatial dimension to the road density calculations to better show where the concentrations of roads are located The intent of the 6 miles/square mile was to suggest a road density so high that wildlife might actually avoid going through that area, realizing that impacts from roads happen at much lower densities When the Forest was able to use ARCINFO to plot the locations of these areas it turned out that they were off the Forest This was a result of the watershed boundaries extending off the Forest combined with high road density in areas off the Forest (e g , Baca area) and not being able to "cut" out the private land with the old MOSS software we were using at the time

7.2 The concept of standardizing the roads according to their use levels is erroneous and gives a faulty representation of the road density. Elk are a poor indicator of how other wildlife species respond to roads, especially the smaller and less mobile species.

We agree and will be dropping the "standardization " Another search of the literature will be done (some suggested by commentors) to check for more studies about small animal response to roads

7.3 Areas identified as critical for wildlife need to be closed year-round to any motorized use.

To date, we have no information which indicates any particular area needs to be closed year-round If such areas became known in the future and it was determined that motorized uses were having a detrimental impact then the Forest would certainly consider closing portions of the area There are S&Gs which speak to seasonal closures The Forest has been doing road closures and more are proposed in the Forest Plan One of the reasons for the closures is the consideration of wildlife So even though the areas might not be deemed "critical" there are roads closed to help lessen the impact of motorized use on wildlife

7.4 The fisheries section was not complete enough and needs to be strengthened. A guideline needs to be added that restricts mechanical disturbances in the stream during spawning periods. The Plan should reflect a commitment to improve trout habitat.

We agree, and the fisheries section will be strengthened

7.5 The potential impacts from snowmobiling on wildlife needs to be improved by incorporating the latest research on the topic. The Forest needs to delineate areas that are off-limits to snowmobiles based upon the needs of various wildlife species. How can it be said that snowmobiles generally use roads/trails/groomed tracks. If true, will that pattern continue. Will their use patterns be monitored.

We agree and will be reviewing the literature recommended by commentors dealing with this subject Based upon that review a decision will be made what, if any, areas should be restricted from snowmobile use The use patterns discussed were based upon the

knowledge the ID team has about snowmobile use on the Forest The expectation is that the current use pattern will continue. Monitoring of the use patterns will be added in the Final

7.6 **The potential impacts from ATV/ORVs on wildlife needs to be improved by incorporating the latest research on the topic**

We agree and will be reviewing the literature recommended by commentors dealing with this subject

7.7 **Do not lump trails and roads together when discussing the impact of disturbance to wildlife since they are completely different**

We feel it is appropriate to lump motorized trails and roads together since they both create a similar type of disturbance on wildlife

7.8 **The impacts from recreation was not complete and failed to recognize that there could be major impacts from recreation users. Questions the consequences to wildlife if recreation growth exceeds the 5%/year growth stated in the DEIS.**

We agree and will be reviewing the literature recommended by commentors dealing with this subject. Any changes to the growth projection will be incorporated into the Final

7 9 **Need to consider the internal connectivity on the Forest for such things as: 1) Old-Growth and patches of late-successional forests, 2) between roadless/wilderness areas, 3) deer and elk between Bonanza and Villa Grove, 4) wolf creek area (need to assess the potential impacts of a expanding the ski area), 5) Cochetopa Hills,**

We feel that we have taken these internal "connections" into account by a combination of Management Prescriptions and the incorporation of the spatial analysis Guideline The Final will include more maps to better display how we feel we have meet the intent

7.10 **The Forest needs to set-up a series of core areas that are connected by corridors Utilize the principles of conservation biology to identify refugia and needed movement corridors. Alternative F provides the best possibility of maintaining the connectivity of the Forest and its concepts need to be considered throughout all Alternatives. Alternative F's level of restoration would have a major impact in alleviating current and potential fragmentation problems and does not track with the statement on pg 3-112 that no alternative would have a major impact on forest fragmentation.**

Alternative F employed this strategy and was analyzed It is debatable if Alternative F is the "best" for maintaining connectivity The Forest offered a counter strategy and both were compared and discussed We feel that there are portions of both strategies incorporated in many of the Alternatives We realize that there is some disagreement as to having roadless areas as "core" areas, but the fact remains that they share many traits (e g , minimal disturbance and low levels of use) Given that there are large portions of the Forest which will remain roadless we feel we have captured the intent of the "core/corridor" and will produce maps which will demonstrate how they are spatially aligned on the Forest The statement on page 3-112 just reflected the fact that when taken in the context of the Forest as a whole, there will be limited amounts of acres which will be altered by human activity

7.11 **Need to take a proactive stance on improving the suitability of the corridors identified as providing connectivity beyond the RGNF. There was no link between habitat suitability and the corridors. Need to consider a corridor with the Carson NF in the Cumbres Pass area. They appear to just encompass high elevation land and**

that makes their suitability of limited value Need to determine which type of recreation is occurring. Need to calculate the road density with the corridors. Should not have any timber harvesting in the corridors. There are two watersheds "currently exceeding the acceptable limit" for stream impairment located approximately within a potential corridor area (Saguache Creek and a Unnamed tributary to Saguache Creek).

The commentors were correct in noting that there was no link between suitability and the corridors. The reason was explained on pages 3-106 and 107 of the DEIS With new software (ARCINFO) we will be able to calculate the actual density of roads We will categorize the type of recreation use Of the two watersheds mentioned, only the Unnamed tributary is nearby According to Appendix K, page 5, the reason it was exceeding the threshold was primarily due to gullies and erosion That would have had a very minor impact upon the current extent of the forested stands which was the basis for determining the location of these potential movement corridors

7.12 **Roadless areas should be saved for wildlife. There has been a appreciable loss of the undeveloped areas because illegal motorized upgrades of foot trails in many roadless areas.**

By saved we assume the commentors meant no timber harvesting and associated road building within the areas As was discussed in the DEIS on pages 3-109, 110 and 126, there will be very few acres with timber harvest activities in the roadless areas, conducted over the life of the Plan The new selected Alternative, G, makes a firm commitment that only a few portions of the roadless areas would be considered for timber harvesting We disagree that there has been a appreciable loss of the undeveloped areas because of trail upgrades

7.13 **There was a failure to recognize the difference between natural patchiness and human caused fragmentation. Pg 3-110, it is incorrect to say that timber cuts can be made to approximate natural gaps.**

We do not feel we said the two were the same, but will add additional text which makes it clear that the two are not the same The statement referred to on page 3-110 is a direct citation and not a statement from the author of the analysis.

7 14 **All timber harvesting needs to be included in the calculations of fragmentation on the Forest, not just overstory removal and clearcutting. All timber harvesting creates edge habitat which leads to fragmentation of the forests. Keller and Anderson (1992) and Crompton (1994) were cited as evidence of the harmful effects of edge. Other types of timber harvesting produces adverse impacts on avian species (e.g.,, Franzerb and Ohmart 1978, Martin 1988, and Hutto et al 1993) therefore must be included in the calculation of fragmentation.**

We disagree For the Final we will be refining the definition of fragmentation to those situations wherein there are habitat islands surrounded by conditions that are hostile for dispersal

The question to be answered is not which type of timber harvesting method causes "fragmentation", but rather as a result of timber harvesting, has there been any change in the natural distribution of patch sizes or structural composition which would create habitat islands. The reason only clearcutting and overstory removal was analyzed is because they were the harvest methods which temporarily converted a forested stand to a non-forested stand and that might lead to possible problems The other types of timber harvesting still leave a forested structure behind Given the natural disturbance processes inherent to the Forest, timber harvesting has not resulted in creating a hostile matrix that would preclude species dispersal

The timber harvesting that has occurred has not greatly altered the patch size distribution or structural composition of the forested stands compared to what is already displayed across the natural landscape We agree that timber harvesting creates edge but the impacts from that edge is not well documented for the Forest as pointed out in the work done by Carter Since the publication of the DEIS another study has been done on the Forest in the mixed conifer forests and the results were very similar to the spruce-fir work no apparent aversion to edges The results will be disclosed in the Final The citations presented did not support the contention that edges were harmful

A review of Crompton (1994) revealed data showing the standard deviation exceeding the mean distance to edge for the bird species (Table 15, p 64) and no aversion to edges for the small mammals studied (Figure 12, p 129) His study looked at shelterwood harvesting which removed about 58% of the canopy cover While not conclusive, he did not find any dramatic vegetative differences in the edge habitat he studied Similarly, Keller and Anderson (1992), on pages 62 and 63 state that they found no evidence that any species preferred or avoided simple forest edges Their study involved both strip clearcuts (100 meters wide) and 2 5- 7 5 acre patchcuts both of which would have produced "hard" edges of contrast between treated and untreated stands By comparison the Forest will be using primarily group selection harvesting (DEIS 3-162) which is a much lighter harvest then either study looked at, removing only about 20%-25% of the canopy cover in each cycle and being done in 1/10 to 1/4 acre groups

A review of the literature cited in support of timber harvest impacts did indeed show that some avian species were adversely impacted by logging This should come as no surprise since it is recognized that there are species tied to particular habitats, for example the study by Carter cited in the DEIS concluded that structural class was the primary attribute which explained species presence and that is a attribute most directly changed by harvesting But that does not support the contention that the other timber harvest methods are causing fragmentation because as shown in the DEIS there are many areas of the Forest which have not and will not be subjected to timber harvesting. So one can not say that the amount of harvesting has formed habitat islands isolated from each other. Rather these impacts are more appropriately addressed in the context of a change in potential habitat capability and was done in the DEIS pages 3-124 to 132

7.15 **The fragmentation/connectivity analysis was flawed and incomplete for a variety of reasons (e.g., reliance on limited research, did not include the impacts of roads or edge habitat, only looked at the impacts upon a few species) The conclusion reached on page 3-112 that no alternative will have a major impact on forest fragmentation is incorrect. There was no relevance to comparing the Forest to other regions of the country Only Alternatives which do not contribute to the current degree of fragmentation should be considered. What has been the impact of past clearcutting in the spruce-fir zone with respect to fragmentation.**

We disagree We feel that we made a good faith effort to incorporate the latest research into the analysis We will be reviewing additional research and will make any necessary adjustments to the analysis See 7 1 and 2 for how the roads will be reanalyzed Only a few species were discussed because there is limited research done The reason for comparing the Forest to other areas was to give the reader a better idea as to the context of the situation on the Forest Many people attempt to apply the situation that has unfolded in the Northwest and Eastern States to the Rocky Mountains We felt it was important to show how the situations differ As stated in the DEIS, pages 3-108 to 112, we feel that there has been very little fragmentation of the Forest (refer to 7 14 for the definition of fragmentation) and no Alternative will change that situation so we feel that we have addressed the commentors desire to analyze a only Alternatives that do not contribute to fragmentation While we did not specifically state how much of the spruce-fir forest has been clearcut, page 3-105 shows that only 3 percent of the forested cover types have been clearcut or had a overstory removal Since spruce-fir makes up the

majority of the forested cover type, then it could be assumed that about 3 percent of the spruce-fir has been impacted by one of those two harvest methods

7.16 The species viability analysis and determination was flawed because 1) lack of scientific documentation to back up analysis, 2) have not shown the quality, quantity and/or distribution of old-growth on the Forest, 3) not accurately taken into account fragmentation from timber harvesting and road building, 4) too lax a standard of viability, 5) failed to take into account the other influences (i.e , past habitat alteration, exotic species, pesticides, herbicides and other toxic chemicals) and react in a affirmative manner - beyond just S&Gs, 6) only addressed a small number of species, 7) not shown where the suitable habitat is located, 8) it is wrong to use LTAs because as potential natural vegetation they can not be changed by management activities. In addition, since an LTA is made up of various cover types, there is know way of knowing if there has been any changes within a particular LTA

We disagree

1) We feel that we made a good faith effort to incorporate the latest research into the analysis We will be reviewing additional research and will make any necessary adjustments to the analysis

2) We do not know of any data which would indicate that there are any old-growth obligate species on the Forest We do have data which would demonstrate that there are late-successional obligates We have spoken to the quantity of late-successional forests (DEIS pp 3-105, 106, 121, 123, 126, and 136). The Final will have maps showing the distribution of the late-successional forest See the response to point #7 for discussion on quality There is also a Guideline to utilize a spatial analysis when planning a timber project that will help in maintaining a "natural" distribution of structure and composition

3) We feel that the fragmentation analysis was taken into account The impacts from roads will be redone

4) We used the definition from the regulations

5) The analysis on pages 3-120 to 124 in the DEIS describe the current conditions which take into account the previous actions and activities Other than noting the presence of exotic faunal species, there is very little that can be said specifically about their impacts on the native fauna There have been very little chemicals used on the Forest We feel that the mix of Management Prescriptions reflect an affirmative role

6) The existing research is concentrated on relatively few species

7) At the scale of a Forest Plan, there is no way to capture the suitability of a particular piece of habitat for a certain species Using the best available data will only give us potential habitat

8) As explained on pages 3-122 to 124, each of those selected parameters can be changed by management activities that is why they were chosen The commentor is correct about the inability to see the cover type make up changes within a LTA To answer that concern the monitoring plan will include a method for tracking the changes in cover type with respect to LTAs It must be realized that given the small amount of management activity proposed, there should be no dramatic changes, over the life of the Plan, unless there is a large-scale natural disturbance

7.17 MIS need to be selected and monitored in accordance with the regulations. Several species were suggested as possible MIS (e.g., marten, brown creeper, boreal owl).

Consider combining species monitoring and landscape and habitat analysis. The LTAs are too broad a measure and would let species fall through the cracks.

As explained on page 3-122 of the DEIS, we feel we are following the regulations. Many of the species suggested are shown on Table 3-25 (page 3-121 of the DEIS) and they are tied to particular LTAs Rather than translating the amount of potential habitat into a estimated population and then see how it changed, we felt is was better to track the habitat itself and not give the impression we knew the population of a particular species We realize that some species can not be covered by this coarse-filter approach To ensure that they do not fall through the cracks, the monitoring plan will be changed to incorporate a fine-filter approach

7.18 **Need a discussion of the impacts to species viability given that 24% of the rangelands are in unacceptable condition. What are the impacts of grazing to the viability of species that require riparian habitat (e.g., Boreal toad).**

We agree and it will be in the Final

7.19 **There needs to be restoration of the native species (e.g., wolves, grizzlies, RG suckers, lynx, wild turkeys). What is being done to bring the wildlife populations back into their range of variability. There are concerns about reintroducing a Endangered species with respect to its impacts on grazing (i.e., wolves), human safety, and ability of the species to survive on the Forest.**

The lead agency for any restoration would be either the Division of Wildlife or the U.S Fish and Wildlife Service. The Forest Service would play a supporting role Page A-49 explains why there is no concerted effort to restore the populations and species mix Prior to the release of any T&E species another NEPA document would be prepared that would address the concerns expressed and allow for public involvement

7.20 **The S&Gs need to be stronger with more measurable values (e.g., thermal and hiding cover). There needs to be standards in place to ensure that recreational impacts do not impair the health of the ecosystem or wildlife (e.g., reaction of sheep and falcons when approached from above). 1) Add to Biodiversity DC #1 (pg I-1) - habitat specialists will be favored over habitat generalists 2) Drop the last sentence from Standards #5 and 8 (pg III-13). 3) Standard #11 is referred to as a Guideline on pg G-3. 4) Under Rx 5.41, change Standard #1 to prohibit all motor vehicles when deer and/or elk are present. Another suggestion was to indicate the number of roads and trails will be limited and will avoid known concentrations of wintering animals. The *same language was wanted for Rx 5.42, Guideline #5. 5) There should be a road* density Standard to limit the amount of roads. 6) A Standard must be developed to ensure compliance with the Migratory Bird Treaty Act. 7) Need something on vertical and horizontal diversity. 8) Wildlife Standard #7 would require that the Rx 3.31 receive constant evaluation to assess the disturbance.**

The intent of the S&Gs as written was to leave enough flexibility to handle the myriad of local situations Hiding cover is a good example The intent is to reduce vehicular harassment Instead of trying to dictate a specific distance or vegetative density, it is left open so that it can be adjusted to the vegetation and topography of the area The reason for not needing a thermal cover S&G is explained on pages 3-205 and 206 of the DEIS Any additional measures dealing with recreational impacts will come about as a result of reviewing the suggested literature

1) We disagree because we feel that it has been covered by the intent to maintain viable populations

2) We disagree since there have been cases of animals becoming adapted to human activity Some examples include goshawks that nest in campgrounds that are still used, redtail hawks that nest near a paved road

3) Thank you for pointing out that inconsistency It will be taken care of

4) It would be impractical and unnecessary to close the entire areas to motorized use when the animals were present By referring to designated roads and trails we already imply that they are limited

5) We feel it is better to manage the road density issue at a more site specific level because there are too many variables involved (e g , amount of traffic, topography, type of road) to address at the scale of a Forest Plan

6) We disagree because the Plan does not authorize activities that result in pursuing, hunting, taking, capturing, and killing of migratory birds

7) We feel this has been addressed by the Guideline that incorporates a spatial analysis prior to timber harvesting in Rx 5 11 and 5 13

8) We agree that evaluations will have to be done, but disagree that they will have to be constant

7.21 **There needs to be species specific S&Gs to ensure their protection. 1) Wildlife #5 - Inactive Goshawk nests need to be protected, including a 100 yard buffer. 2) Wildlife #9 - drop reference to "hack sites" since the DOW no longer hacks falcons. 3) Wildlife #10 - questioned if 100 yards was an adequate buffer, others suggested increase restrictive zone to 1/4 mile and change the dates from March 1 to March 15. 4) Wildlife #12 - add "especially wetland areas." 5) Wildlife #13 - drop since already covered under #9 6) Wildlife #19 - how will the protection from timber sales be accomplished. 7) Need to add a standard to conduct nesting goshawk clearances. 8) Add a guideline to avoid the creation of edge habitat near roads and other human-induced dispersal corridors 9) Where TES fish are present, a minimum 6" stubble height should be in place. 10) More protection is needed to Boreal toads and Rio Grande cutthroats. 11) Pg III-14, #14, with respect to the Uncompaghre Fritillary Butterfly, any livestock grazing should be considered a ground disturbing activity. 12) Pg III-14, #19, with respect to the Mexican Spotted Owl, rather than "limit" disturbance, need to speak to placing particular restrictions on human disturbances.**

1) We will incorporate the mitigation measures that come out of the Regional Biological Evaluation for Goshawks

2) As discussed below, this Standard will be dropped altogether

3) The wording will be changed to make the buffer distance site specific depending upon the local factors and eagles tolerance of humans

4) Will do

5) Will do the reverse, keep #13 and drop #9 since #13 is language from the Recovery Plan

6) The protection could be accomplished in a number of ways; some examples include, moving a harvest unit, deleting a harvest unit, restricting the harvest activity to a particular time of year

8) There is no way to avoid creating edges with the mentioned activities However, implementing the standard that speaks to providing cover along roads and openings should soften the created edges

9) We disagree because there is flexibility already built into the Guidelines to adjust the stubble heights if it is felt to be necessary to maintain or improve the aquatic habitat

10) We feel that we have provided adequate protection measures by developing various S&Gs that address the riparian and wetland habitats A Conservation Strategy is currently being developed for the Boreal Toad and its results will be incorporated into the Plan

11) We disagree and refer the commentor to the Biological Assessment written for the recent Range Permit Reissuance effort that made a determination of "No Effect" from typical sheep grazing in the alpine areas The Fish and Wildlife Service concurred with the determination

12) We feel that as written, #19 gives the direction needed to place the necessary restrictions on human disturbances to avoid negatively impacting the Owl

7.22 **The snag S&G needs to be changed to 3-4/ac and largest ones left and clumped if possible. Need to be aware that some snags provide roosting habitat for bats. Why leave a "minimum" and not what occurs naturally. The density should be calculated over a landscape or watershed level, not project level. On page 3-126 of the DEIS it speaks to leaving 3-5 snags per acre and yet the S&G on page III-6 of the Plan speaks to 2 snags per acre, why the difference. If as claimed in the DEIS 3-127 leaving small areas without snags is of limited impact, why require retention of snags then. The minimum size for a Ponderosa snag should be 15 inches. Were potential corridors taken into account when dealing with the snag-dependent group. The minimum DBH requirements depart dramatically from natural condition of a unmanaged forest. Replacement snags should be figured into the snag S&G. There is no justification for the minimum required diameter of down logs to be smaller than the standing snags. There should be a range of diameters for snags and down logs.**

The inconsistency in snags per acre will be corrected The difference was do to the fact that there was a miscalculation in the Regional Guide that yielded the 3-4 snag figure The 2 snag figure is based upon the work cited in the DEIS page 3-120 and is the one that will be kept

We will change the verbiage in the table found in the Plan on page III-6 to reflect that we seek the largest snags and will only use the minimums when there are no larger snags around

There are two reasons we speak to minimum numbers for snags First, the issue of safety There would be too many snags standing if we left what occurs naturally to allow for the safety of the people working in the woods Second, these are mitigation measures designed to lessen the impact of the activity, not provide optimum habitat

In reference to the comment about page 3-127, we feel it would still be important to leave snags within a project area since some species would find value in them For that reason we disagree that the snag densities should be calculated over a watershed or landscape level Given the high numbers of snags beyond the project areas, it would be possible to remove all snags in the project area and still met the requirements The size for the Ponderosa pine snags will be increased to 12 inches and the size for aspen would be decreased to 10 inches We feel this will bring it in line with the other sizes that reflect the averages of the larger trees, by cover type, which grow on the Forest This is especially true for the northern part of the Forest which is dryer We do not want to give sizes that are not realistically obtainable With the new wording about favoring the larger diameter snags we believe we can still get the largest snags available

The potential corridors would be handled by the spatial analysis Guideline As written, replacement snags are suppose to be figured into the project design

We disagree on the issue of size differences between the snag diameters and the downed log diameters They are speaking to two different needs To make that point we will change the term "downed log" to "coarse woody debris." We feel that the new term is more appropriate to describe the attribute According to research, coarse woody debris three inches or greater provides a multitude of benefits such as nutrient recycling, wildlife habitat and ecosystem health As a result, the minimum size will be reduced to three inches We will be changing the way it was measured from linear feet to tons per acre We feel that this is a more accurate way to measure The linear distances suggested in the DEIS were felt to be too low upon re-examination The proposed tonnages actually increase the amount of material in a given forest type and are based upon the latest research We will write the Standard such that the coarse woody material is made up of a variety of size classes

7.23 **Pg 3-109, there are two citations missing - Erhard et al. (1995) and Knight (1994).**

Thank you for pointing out the omission, they will be added

7 24 **The results of the winter range work needs to be included. How will the winter range be monitored and protected from such things as motorized travel. The acreages assigned as winter range seem large.**

The results will be incorporated into the Final The monitoring will be done with periodic site visits to ensure that the S&Gs are being implemented If implementation is not occurring, actions will be taken to address the situation and bring about consistency with the S&Gs The acres assigned as winter range is based upon information supplied by the DOW and reflects the use patterns seen by deer and elk over the years

7.26 **The Forest needs to protect and provide habitat for all fish and wildlife species in order to maintain viability and preserve biodiversity and sustainability The impacts of any proposed management actions needs to be displayed in the EIS The Forest needs to enhance habitats whenever possible.**

We agree and feel that we have accomplished that task (DEIS 2-17 and 18) We recognize the value of habitat enhancement and expressed it as part of Forestwide Objectives on page II-3

7.27 **It is a known fact that roads and motorized use disturb wildlife. Others felt that wildlife has shown the ability to adapt to the amount of use and roads currently on the Forest.**

We agree and feel we have addressed both of these points in the DEIS on pages 3-103, 104, 127 and 128

7 28 **There needs to be more roads closed to improve wildlife habitat and protect biodiversity while others felt that enough roads had been closed to reach those objectives. Questions the proposal to close the Seepage road to protect bighorn sheep. All roads within Rx 5.42 need to be closed.**

There is agreement that some roads need to be closed to protect resources, including wildlife There is also acknowledgment that driving is a popular form of recreation We have attempted to balance these two objectives by taking another look at the roads proposed for closing in the DEIS We do not agree that it is necessary to close all the roads in Rx 5 42

7.29 **The Forest must manage as if there are grizzlies present. Pg 3-116, evidence of grizzly bears in the San Juan Mountains has been produced, but the Fish and Wildlife Service considers it inconclusive. The presence of wolves and grizzlies has not been reliably documented.**

As stated on page 3-125 of the DEIS, no alternative would jeopardize any potential grizzly habitat *We agree and will change the wording on page 3-116 The commentors are* correct, there has been no reliable documentation

7.30 **Conservation strategies must be developed for all TES species to ensure their recovery. *This is required by the ESA and 2670 manual. The Forest is obligated to do* what it can to "recover" TES species There needs to be a population viability analysis done for each of these species. There is little or no information on why a species is considered Sensitive. Need to evaluate the current status, distribution, and threats to TES species. The potential habitat for TES species needs to be mapped in a way as to show the actual carrying capacity of the habitat.**

Developing recovery plans and conservation plans is not a requirement of Forest Planning Recovery plans are developed for species listed by the Fish and Wildlife Service as threatened or endangered While the Forest Service may contribute to the development of recovery plans, the Fish and Wildlife Service is the responsible agency

In some cases conservation strategies are developed for TES species These again are usually developed through inter-agencies efforts and cover larger geographic areas than an individual National Forest If such strategies are in place, the Forest can (or has, if you are dealing with a species for with a strategy has been developed) incorporate the appropriate information into the Forest Plan during amendment or revision but such strategies are not required as a product of Forest Plan revision

Occasionally conservation agreements are developed between agencies to give general guidance on what each agency will do within it's authorities to promote the conservation of a species Again, this is not a requirement of Forest Plan revisions

A biological assessment and biological evaluation was developed to address all of the threatened, endangered, and sensitive species on the Forest or that could be effected by management of the Forest The Fish and Wildlife Service has concurred with the determination for listed species and the measures needed to protect them, if any Habitats for sensitive species are either not effected by actions addressed in the Revision or standards and guidelines were developed to protect habitats where appropriate

If in the future, new recovery plans, designations of critical habitat, conservation strategies, or conservation agreements are developed, the Forest Plan will be reviewed to determine if it is consistent with new documents

Evaluation of and protection for TES species has been provided for There is no requirement that Forest Plan revisions must produce conservation strategies for each of the individual species present on a Forest We agree that there is a duty to "recover" the species and believe we are doing that through the implementation of the S&Gs and mix of Management Prescriptions A discussion will be added in the Final about "recovery "

There is no requirement to perform a viability analysis for each of the species present on the Forest Page 3-119 of the DEIS pointed out why we choose the strategy we did in assessing species viability We still feel that it was a sound way to proceed with a very difficult concept

We will add to the Final, a discussion about why a particular species is on the Sensitive list and maps displaying the location of the potential habitat Because the suitability of the

habitat can only be assumed, it is impossible to say what the carrying capacity would be for any particular habitat

7.31 **The Forest provides some of the last, best places for such species as wolves, lynx, wolverine, grizzly. Much of the habitat for those species has already been lost to human disturbance. Consider taking a proactive approach and develop a prototype for a lynx and wolverine statewide inventory.**

We agree a statewide effort is needed to adequately address the inventory needs of the lynx and wolverine Evaluations are underway on a strategy for how best to inventory and monitor those species which occur across many different Forests

7.32 **Page 3-203, what are the nine species of fish referred to and how are they being conserved. Are any non-native trout being stocked**

Turns out there are eleven species known to occur and two that might occur on the Forest The eleven are rainbow trout, brook trout, brown trout, Yellowstone cutthroat trout, Snake River cutthroat trout, Colorado River cutthroat trout, Rio Grande cutthroat trout, Kokanee, white suckers, Longnose dace, and Flathead minnows The two suspected species are Rio Grande chubs and Rio Grande suckers Each of these species are know from locations off the Forest but in streams that originate on the Forest Their conservation is being achieved via the implementation of the various S&Gs which relate to water resources Pages 3-210 to 235 of the DEIS analyzed the water resources of the Forest

The DOW stocks non-native trout every year in various streams and lakes on the Forest

7.33 **What about Whooping Cranes on pg 3-21**

The list of species given was only meant to be representative to give the reader an idea as to the varied nature of the fauna

7.34 **How can Alternative F result in fewer big game animals and therefore be less suitable for potential wolf reintroduction. The Forest should manage habitat to support wolves**

This was an error on our part and it will be corrected in the Final Page 3-125 of the DEIS explains why we feel no Alternative would jeopardize potential wolf habitat

7.35 **Why does the Wildlife section not include a discussion on wide ranging carnivores. The Wildlife section needs to include a discussion on more species.**

Some (i.e , lynx, wolverine, marten) were addressed in the Biological evaluation for Sensitive species and the wolf and grizzly were addressed in the Viability section (pages 3-124 and 125 of the DEIS) We feel that there was no need to add to the discussion in the Wildlife section because our intent was to cover the rarer species as was done in the section on viability

7.36 **Appendix A of the DEIS, page 37, there should have been a mention of Bighorns in the Sangres.**

We agree and it will be added

7.37 **Sound science needs to be the basis from which to make resource decisions such as: impacts on fisheries, migration routes, impacts of timber harvesting, etc.**

The definition of sound science is elusive, depending upon the individual We feel that we have relied upon the scientific literature when we could and used professional judgement when there was no literature to consult

7.38 **What species of trout inhabit Elkhorn Creek? If cutthroat still exist, then their habitat needs to be protected. The Forest should consider Pole Creek as a potential cutthroat trout fisheries.**

These are questions better answered at the project level We feel that implementing the various S&Gs that deal with water resources will improve the habitat for all fish species The Forest and DOW work closely in restoring Rio Grande cutthroat trout to the Forest There is a process of evaluation needed before any restoration is done to better ensure the success of the project

7.39 **How will the necessary wildlife input be provided with the reduced staffing of biologists on the Forest. The Forest should budget the full amount for Wildlife and TES.**

We do not have the answer since we are still working through the effects of reduced staffing The Forest is committed to doing what it can with the level of budget and staffing it receives The budget that the Forest receives is dependant upon what Congress appropriates What the Plan attempted to show was what we felt was necessary to implement the full program compared to what we have received in the recent past We have limited control over the size of the final budget we receive every year

7.40 **There are many assumptions incorporated into the Plan and there needs to be a high priority placed on validating the assumptions. The monitoring portion of the Plan needs to be improved. Further studies are needed to provide the necessary answers to the resource questions (e.g., reference area habitat conditions, habitat suitability, importance and need for corridors). More work needs to be done to complete the necessary inventories to locate TES species Will work be done to begin evaluate the two strategies used to combat fragmentation (e.g , dispersal distance, habitat requirements).**

We recognize that the assumptions need to be validated and will be identifying the data needs to do that We will then attempt to work the needs into the budget and yearly program of work Many of the data needs are better answered at the Regional level and we will be working with the Regional staff to determine how best to get the data We will be making changes to the monitoring plan that we feel will improve it There are no plans at this time to test the two strategies since we feel that given the low level of fragmentation on the Forest it is a low priority

7 41 **Pg 3-119, is there genetic interchange for non-wide ranging species.**

We do not know for certain, but given the discussion on pages 3-108 to 112 of the DEIS, we think it is a good assumption We will be reviewing additional literature to determine if we missed something

7.42 **Forest management activities should not be assumed to fulfill the role of insects and disease in the development of habitat conditions important to some species.**

We agree

7 43 **Pg 3-109, there are cowbirds on the Forest and their numbers may increase. The DEIS contradicts itself by stating that the Forest is not conducive to cowbirds, yet goes on to say the Forest is patchy with plenty of naturally occurring edge habitat. The**

Forest has failed to acknowledge the potential impacts of cowbirds and other edge-associated predators.

We agree The sentence in question was poorly written and was meant to convey the fact there are low numbers of cowbirds on the Forest There will be a change in the text for the Final Given the low numbers of cowbirds on the Forest it seems reasonable to assume that the habitat must not be conducive to them and with no major changes to the forest habitat planned, it should stay that way for the near future The reason there was no discussion about edge-associated predators is that we felt given the small amount of created edge compared to natural edge, the predator-prey relationship would be driven by the natural processes and not altered significantly by human activities

7 44 **Exception was taken about the statement on page 3-108 of the DEIS which speaks to the lack of habitat specificity of mammals and assumption about their area-sensitivity.**

Another look at the source of that statement revealed that is was the opinion of the author As such, it will be removed from the final

7.45 **What will be the basis for determining where "tall dense nesting cover" will be desired.**

The basis will involve two factors The first factor is the presence of certain species (e g , mallards, teal, Savannah sparrows) that require the necessary nesting habitat The second factor would be the relative risk to the habitat associated with a particular activity If the species is present and there is a high risk to that habitat then the Standard would be employed

7.46 **Change the "wills" with "shoulds" within the 5.41 and 5 42 Management Prescriptions Add a statement in the DCs to resolve conflicts in favor of wildlife.**

We disagree since we feel the language as written provides firm direction as to what the S&Gs are suppose to accomplish. We feel that adding the suggested statement is redundant since the Theme of the Prescriptions clearly state that they are for the wildlife species in question

7.47 **Forest should consider the status of Plecotus townsendii as unknown, with high potential to be found. What protective measures are in place for the identified roost colony.**

We agree and tried not to give the impression that we knew the status We only reported upon the inventory efforts to date If a roost colony was discovered we would implement Wildlife Standards #'s 1, 6 and 7 which speak generically to protecting the species The actual measures taken would depend upon the circumstances of the situation

7.48 **Forest should still consider the amphibian surveys done to date as incomplete.**

We agree and will continue to look for them

7.49 **Pg F-13, the relative absence of cavity nesters should be mentioned along with the statement of the high snag numbers.**

We agree and will add it

7.50 **The Forest needs to see where the Winter Range Prescription (5.41) does not cover the areas delineated by DOW as winter range. In those areas not covered, a**

statement needs to be included in those particular Prescriptions which will recognize and protect the winter range.

We do not feel it is necessary because if it was not designated as 5 41 it was designated a Management Prescriptions which was even more restrictive than 5 41

7.52 Pg 3-130, the needs of the species needs to be accounted for when determining if sufficient habitat exists for that species.

We did take into account the species needs as shown in Table 3-25 (page 3-121 of the DEIS) that tied them to a particular habitat As explained on pages 3-128 to 131 of the DEIS, we feel it is reasonable to judge sufficiency against what the landscape is capable of producing This technique prevents making judgements about the amounts and types of habitats that the landscape might not be able to produce and sustain

7.53 Why are there no population estimates for non-game species and how is the Plan assuring that their viability is maintained.

The reason is that the Division of Wildlife has not tracked them The assumption used, as explained on page 3-119 of the DEIS, is that if the viability of the rarer species is addressed, the more common species would be taken care of

7 54 What is meant by "limited impact" on neotropical birds on pg 3-209.

Not sure what is being asked because the paragraphs on the page explain what is meant by the term

7.55 Pg 3-218, how does reduced streamflow affect wildlife.

As pointed out on the page, there could be a alteration of riparian habitat This could lead to a change in distribution and population of those species which utilized riparian habitat.

7.56 Timber harvesting has positive impacts for wildlife

That is true for some species, primarily those which exploit the earlier seral stages and edges

7.57 What is being done to protect the Boreal toad.

Those protections are described on pages F-13 to 14 of the Appendix to the DEIS

7.58 What is being done to protect the RG cutthroat where habitat conditions are a concern.

Those protections are described on pages F-13 to 14 of the Appendix to the DEIS

7.59 Inventories are needed for TES species (e g., Boreal owl, Loggerhead Shrike, Olive-sided Flycatcher, marten, lynx). How can the Forest avoid disturbing TES species if their locations are not known. The studies must be scientifically defensible Resource decisions should be adaptive and reflect the findings Defer any decisions which could result in negative impacts to wildlife until the necessary research is completed.

We agree that more inventories are needed and will continue to conduct them as staffing and budgets allow We are continually searching and recording TES locations but realize that we do not know them all That is why Wildlife Standards 6 and 7 were developed

Only a few species have a agreed upon protocol for inventories and we follow them We attempt to conduct our studies using the scientific principles, but realizing that we can not afford the rigors associated with research science It is not practical to wait until all the research is in before we act because there would never be enough research to completely answer all the questions

7.60 What is being done to protect the Flammulated owl.

Implementation of the snag Standards and very little timber harvest in the Ponderosa Pine cover type

7.61 What is being done to protect the Southwestern Willow Flycatcher. How is range management impacting this species.

That can be found on page G-5 of the Appendix to the DEIS

7.62 What was the basis for the determination of "minimal impact" to the Peregrine Falcon

The basis was given on page G-4 of the Appendix to the DEIS

7.63 How will the impacts of fragmentation be monitored and evaluated.

That will done by comparing developed landscapes against reference landscapes with respect to patch size, structural class composition, and cover type make-up

7.64 The definition of Sensitive species needs to be changed so that it is clear that designation of species demanding special management attention is not optional. The Forest Service needs to develop an improved basic criteria and procedure for the selection of Sensitive species.

Any change in definition is beyond the scope of the Plan

7 65 Without a Forest-wide old-growth survey, how can the viability of those species dependant upon old-growth be assured.

We do not know of any species of wildlife which is dependant upon old-growth However, there are species which are dependant upon the later successional stages and that is why we created the late-successional grouping defined on page 3-106 of the DEIS

7.66 A clarification of wording for a goal statement with respect to habitat capability was proposed.

We disagree since we do not see how the proposed wording adds to the intent of the goal

7.67 There is opposition to dropping the road density analysis and replacing it with a geometric analysis.

We do not plan on dropping the road density analysis We will strengthen it with a spatial tool called "moving window analysis "

7.68 Wouldn't stand replacement fires create more of a barrier than the proposed uneven-aged silvicultural treatments.

It would depend upon which species one was talking about, but yes it could

7.69 **What big game population level is the Forest trying to achieve. Why manage habitat above the DOW herd objective. It is the Forest's responsibility to require DOW to hold game populations that fit the Plan and forage availability.**

We attempt to manage the habitats to provide for the population objectives Just because a population is higher than objective, we would not alter the habitat to bring the *population down There are too many other species of wildlife which would be impacted* by that strategy The DOW does try to keep the herds at objective by issuing various numbers of harvest tags There is a effort currently underway to reassess the herd objectives for big game We have a good relationship with the DOW and they take into account our concerns about range condition and try to react to them

7.70 **Pg S-7, what are the projects and condition levels for neotropical birds.**

At the time the table was prepared we were planning to have a project in the various cover types like we had done in spruce-fir (referenced in the DEIS) The cover types were spruce-fir, aspen, mixed-conifer, Ponderosa pine, pinyon-juniper, and riparian We had completed the spruce-fir and were going to start on the mixed-conifer That left four more cover types to complete and that is the "four" you see in the table There has been a change since then and we will set up some long term monitoring stations in some of the cover types and will be tracking how many of those stations we decide upon

7.71 **Pg II-3 - 2.8, How can this objective be achieved**

Achievement would be done by slowing the invasion of conifers into the aspen stands

7.72 **Pg III-7 - identify in the Plan which species might be considered for potential reintroduction.**

We feel it is better to keep it open so that we are not faced with a situation in the future where a Plan Amendment is needed because we did not list all the possible species which might be reintroduced

7.73 **Pp 3-125 and 127 *do not agree with respect to the amount of roads proposed for* construction.**

It will be corrected in the Final

7.74 **Pg III-10, Delete the Standard of no harvest within 600 feet of timber line. Change the distance to 500 feet vertical.**

We disagree and will keep it as written

7.75 **Hiding cover requirements for deer and elk are the same for all Alternatives since FORPLAN only allowed for a maximum of 36% of any watershed to be in "created openings." Nothing was presented that suggested that hiding cover was lacking on the Forest.**

The commentor is correct in that we did not identify hiding cover as lacking But the opening constraint is much more than just big game hiding cover, it was developed to address a variety of resources shown on page III-11 of the Plan

7.76 **Because of its radical nature, the island biogeography theory should only be applied to Alternative F.**

We disagree that the theory is radical Rather, the controversy comes in trying to apply *the theory to the mainland "islands" of forest stands As explained on page 3-102 of the*

DEIS, there are aspects of the theory which can be applied to mainland "islands" and need to be discussed regardless of alternative

7.77 Perhaps a mixture of the two strategies dealing with fragmentation should be tested.

We believe we have done that since we feel the roadless areas can serve as core areas See comment and response for 7.10 for a further discussion

7.78 Sharply reduced timber harvests will reduce the creation of new "edge effects" and reduce biodiversity.

While it is true there would be fewer linear feet of human created edges, that does not equate to reduced biodiversity There are many components of biodiversity besides edge

7.79 Pp III-13 and 14, which Standard applies to the Peregrine Falcon - 9 or 13. Does #13 apply to occupied nests only.

The correct one should be Standard #13 and it would only apply to active nests

7.80 Pg I-1, the presence or absence of a TES species should call for different levels of desired conditions.

We agree. However, to demonstrate a species was not present would take a tremendous effort To avoid expending that effort, we feel it makes more sense to say that if the Forest has potential habitat for a species, then the species is possibly present

7.81 Pg III-13 Standards 4&6, there should be an inventory conducted to see if the species actually exists before action is taken which could adversely affect management.

We agree, but see the response to 7 #80

7.82 Pg V-5, changes in habitat condition also needs to include wildlife numbers, density, and time.

NFMA regulations 36 CFR 219 19 discuss that alternatives shall be stated and evaluated in terms of both amount and quality of habitat and animal population trends There are long standing laws and policies that establish that the Forest Service is responsible for habitat and the State agencies are responsible for the species and populations 36 CFR 219 19 requires that the Forest manage habitat to maintain viable populations Our focus is on habitat and trends in habitat are presented in the EIS for all alternatives The changes in habitat also reflect the likely trend for the populations, and in some cases, population trends are discussed Population information is not readily available for many wildlife species and populations for many species can vary greatly because of factors other than management of the National Forests, such as weather Many of the bird species are migrants and are not year round residents of the Forest Factors off the Forest can also influence population trends and the Forest has no control over that There is no requirement that we present population numbers or sizes during the planning process

7 83 Pp V 8-12, wildlife impacts should be analyzed.

Those impacts would be covered under the Range monitoring for trend, condition, and allowable use

7 84 Since it is stated that many species depend on habitat beyond the Forest boundary, AUM reductions need to be weighed heavily since they will cause a greater impact to those other lands.

We agree, but can not allow resource degradation on National Forest lands because of a potential impact to private lands.

7.86 **Pg 3-206, more analysis needs to be done before the link to domestic sheep can be proven as the suspected cause of the die-off.**

Since the DEIS was published more information was received from the Division of Wildlife and it will be included in the Final

7 89 **Many of the acres that are considered as late-successional forests do not provide the necessary habitat characteristics for the species dependent upon sizeable snags and/or down dead wood.**

We disagree The commentor has presented no information to back up the claim

7.90 **Pg 3-115, Critical habitat has been designated for the Mexican Spotted Owl**

That is correct and will be reflected in the Final

7.91 **There is no mention of the Rio Grande sucker.**

That was an over-sight on our part and will be taken care of in the Final

7.92 **Clarify whether Management Rxs will affect some LTAs more than others and if the proposed road closures are prioritized on this basis.**

We feel we did that by showing the impacts to the LTAs by proposed activities, which are regulated by the particular Management Rx For the Final, the roads to be closed will be displayed The commentor makes a good point and we will consider setting up the priority for the closures

7.93 **Pg III-7, Biodiversity Guideline #7, reference landscapes should consider slope, aspect, soil conditions, and surrounding forest types. Pg V-5, Biodiversity #1, what are the criteria for developing the reference landscapes.**

We agree and the criteria for the reference areas chosen to date are described in the paper Erhard et al (1995) that is cited in the DEIS

7.94 **Pg 3-124, what is "spatial pattern parameter."**

As explained on pages 3-122 and 124 of the DEIS, it was simply a way to see how a particular habitat was distributed across the landscape

7.95 **Pg 3-124, what and where is the spatial analysis guideline in the Fragmentation section.**

It is described on page 3-108 of the DEIS and is Guideline #1 on pages IV-34 and 35 for Management Prescriptions 5 11 and 5 13

7.96 **A contingency plan needs to be developed in the event of confirmation of grizzlies on the Forest.**

We agree and will be developing a contingency plan on what actions we will take if the presence of a grizzly bear is confirmed

7.97 **Can fish still be stocked in a river that has been declared Wild and Scenic.**

Yes, as long as they do not adversely effect any of the Outstandingly Remarkable Features for which the River was nominated

7.98 **Need to fully disclose the impacts of harvesting the late-successional forest on wildlife (e.g., habitat quality, edge effect, etc.). Before an adequate analysis can be done need to know the locations of the proposed harvesting Questions that there really will be adequate amounts of late-successional forest beyond the Forest boundaries given the amount of harvesting that has occurred or is proposed on neighboring Forests. Questions that the loss of up to 4360 acres of late-successional can be considered "very minor" for wildlife**

We feel that the impacts have been disclosed in the DEIS As explained in the Preface of the Draft Plan, the Plan is a guiding document and not a project level document There are many different factors to consider prior to placing a timber harvest unit on the ground That is one of the reasons for conducting project level NEPA The conclusions made about resources beyond the Forest boundary were based upon the best available information When viewed as a whole, harvesting 4,360 acres out of 710,500, would be considered a very minor reduction It is recognized that there could be major site specific concerns and that is where the project level NEPA comes into play

7 99 **The Forest needs to consider the impacts of flyovers from military jets on wildlife.**

We disagree This activity was already covered in a separate NEPA document.

7.100 **Stands designated for protection for wildlife and contiguous stands should not be entered for timber harvest since it increases the risk of insect and disease.**

We disagree because the increased risk is so small As stated on page 3-191 of the DEIS, since planned activities will affect an extremely small percentage of the Forest, insect and disease populations are not expected to change appreciably for the next ten years

7.101 **The Forest should implement appropriate hunting and fishing regulations when damages are documented. The Forest can not claim that the State has all the responsibility to limit the adverse impacts of consumptive recreation**

There are many laws and regulations which give the States primacy in determining hunting and fishing regulations We do interact with the Division of Wildlife to bring forth our resource concerns and work towards a mutual solution

7.102 **Pg IV-38, need more discussion on the interaction between domestic sheep and bighorn sheep. The declines have been overemphasized since bighorns tend to experience wide swings in population, naturally. All domestic sheep should be removed from Management Rx 5.42.**

We disagree because there has been many studies done which have demonstrated the impacts domestic sheep have on bighorns The paper cited on page 3-206 of the DEIS, was representative and incorporated many other studies, demonstrating a negative correlation between bighorn sheep persistence and the proximity to domestic sheep for 88 different bighorn sheep populations

Sheep grazing is a legitimate use of the Forest and the permittees needs have to be considered It is not practical to immediately remove the domestic sheep since there could be social and economic hardships upon the permittees There would also be the question of fairness since many of the transplanted bighorns were placed within domestic sheep allotments We realize that an argument can be made that the bighorns were there first, but that ignores the changes that occurred in the area over time We feel that it is better to work with the permittees to facilitate a mutually agreeable move

7.103 Change Forest-wide objective to add the phrase "...without incurring decreased range or wildlife population conditions."

We prefer to keep the focus upon the habitat and feel as written it addresses the commentors wishes since there is a strong link between habitat and wildlife populations

7.104 There was inconsistency in the use of CHNP data between the plant and animal Biological Evaluations

That was because there were plants ranked as G3 or rarer which do not appear on the Sensitive species list That was not the case for the fish and wildlife species known or *suspected to occur on the Forest*

7.105 How will the Coordination Agreement with the DOW be incorporated into the Plan.

Portions of it have been melded into various S&Gs (e g , timberline timber harvesting, hiding cover, protection for riparian areas) Other portions better fit at the project level (e g , timing and location of harvest units) Because the Agreement was designed to facilitate coordination between the two agencies for the existing Plan, modifications will need to be made when it comes time to implement the new Plan to reflect the latest changes in research, regulations, and policy

7.106 The Forest has failed to demonstrate that there are no species dependent on interior forest conditions. Given the amount of timber harvesting on the Forest there is a very high likelihood that large forest patches with interior habitat has decreased and adversely impacted those species known to depend upon interior forest habitat. Page 3-108 and 109, it appears that the work of Keller and Carter should have been in the section on "edge effect."

We feel that we have presented compelling evidence for neotropical migrants with the Carter study cited in the DEIS Colorado Bird Observatory (CBO) conducted a similar study in the mixed conifer forests and reached very similar conclusions to the Carter study. CBO also looked at the impacts from a recent group selection harvest and found very little impact to the species composition, including brown creepers Both of these studies will be discussed in the Final We fail to see how the Forest has lost many of its larger patches given that the majority of the forested stands have not been subjected to any sort of timber harvesting However, since there might be some impacts from edge that we are unaware of, we have decided to add an edge metric to the analysis described in the Erhard et al *(1995) process. The commentors are correct about the misplacing of the* Keller and Carter work and it will be changed in the Final

7.107 Pg F-15, Confused by the term "Central Rocky Mountain Basin."

That was the term used by the author cited

7.108 Pg 3-108, the comment that the results of the two spruce-fir bird studies provide "no indication that the birds exhibit an aversion to habitat edges" is not true for all species CBOs study showed that the Cassin's Finch avoided the triple patch size, the one with the most edges Golden-crowned Kinglet avoids patches with either high or low proportions of edges, preferring a intermediate amount. The strong association to structural stage should be mentioned at this point since so many species responded to changes in the various stages.

Thanks for the correction The connection to structural stages will be brought forward in the Final

7.109 **Pg 3-206, species richness and abundance increased across structural stage. For patch size, the smallest and largest patches held the highest values for richness and abundance**

We will add this to the Final

7.110 **Pg 24 of DEIS Summary, reference should be to Neotropical "migrant" birds.**

We agree and will change not only the reference cited, but all instances when the term neotropical is used

7.111 **Need more comment on the potential impacts on native ecosystems of the introduced moose.**

Will add some discussion on that topic in the Final Will not be specific since the impacts are unknown at this time and we did incorporate what data we have gathered

7.112 **Pg F-1, questioned the sources of literature used, there was no general references cited for the mammals of the Forest**

Good point and it will be addressed in the Final

7.113 **Pg F-16, slight clarification to line 3 of the "Caves" paragraph "...access [for these bats] to any mine..."**

We agree and will incorporate into the Final

7.114 **Pp 3-115-116, should use the term "restoration" rather than reintroduction when speaking of grizzly and wolf**

We agree and will incorporate into the Final

7.115 **Wonders why Kirk Navo, a person with local knowledge of bats, was not on the mailing list**

Mr Navo was consulted quite frequently during the development of the Draft and provided comments to the Draft

7.116 **Pg 3-123, Table 3-27. The percentages for Ponderosa and fescue LTAs are too high based upon a map provided by the planning team**

We will double check to make sure there were no errors in either the map or the calculations

7.117 **Pg 3-74, If the Forest does not know what the rangeland cover types are then you can not assess the impacts of livestock grazing**

The paragraph will be rewritten to clarify what is known about the rangeland cover types The section focused on the forested cover types within the RGNF because the data available for the rangelands was too general with respect to age or structural class The discussion in the previous section on LTAs has some information on rangeland cover types, especially LTAs 4, 8, 9, 10, and 12 In addition, the Forest does have data concerning the condition of the rangelands (see the Range Section) This data has been used to assess carrying capacity and restoration needs for the rangeland resource We agree that an ecological classification system is desirable for the Forest

7.118 **The Forest should give special consideration to the lower elevation forests**

We agree and feel we have provided for that protection through a variety of means For example, the majority of the lower elevation forest is in a Management prescription that does not allow for timber harvesting And as discussed in the DEIS pages 3-193, 194 and 196 we recognized the impacts of fire suppression and will be adding some language into the Final Plan which speaks to reintroducing fire back into those ecosystems

7.119 **The Forest only looked at one of the four major ways to analyze fragmentation. The *four ways were: 1) area of cuts and roads, 2) area of edge between cut and uncut* forest, 3) are of edge between uncut forest and roads, and 4) dissection of patches by roads The commentor cited numerous papers to elaborate upon the various ways to measure fragmentation.**

As explained in 7 14, we used a different definition of fragmentation than the commentor However, as shown in the DEIS on pages 3-108 to 110, we did indeed look at the attributes of edge and roads For the Final we will be adding to the analysis for edges and roads *In addition, for the project level analysis found in Erhard et al (1995) we will* be adding an metric to attempt to capture the amount of high contrast edge one would expect to find In this context, high contrast will mean situations where forested stands abut non-forested stands At this time, the sensitivity of our RMRIS maps and spatial model does not allow us to split up patches bisected by roads We will be relying upon the new road analysis discussed in 7 1 to address the issue of road fragmentation.

7.120 **The Forest needs to quantify how fragmented its landscapes are now in comparison *with the earlier periods when timber harvesting and roads were rarer.***

We feel that our way of analyzing fragmentation was adequate and will be added to in the Final with those attributes discussed in 7 119 We had originally attempted to "grow back" the forest in order to see what the conditions would have been like presettlement. As a interdisciplinary team we felt that there were too many assumptions that had to be undertaken to yield a supportable product For example, those stands that were harvested, what was their make-up before the harvest? Those stands that showed evidence of having been burned, what did they look like prior to the fire? That is why we chose the process as described in Erhard et al (1995)

7 121 ***There are doubts that the Forest has updated its database to reflect the changes to* either stand boundaries and/or structural stages following a timber harvest**

The Forest has spent considerable time cleaning up the database to make sure it has the latest changes resulting from timber harvesting activities

7.122 **The DEIS cites the work done by Carter (in prep) as a primary authority to justify increasing fragmentation on the Forest. There are several problems with the cited *study done by Carter. 1) it only looked at unmanaged forests and as such failed to* take into account the impacts of managed edges As a result, it is not an adequate study of the effects of managed forest edges on birds. The commentor cited Keller and Anderson (1992) to show that there has been a study which reported to demonstrate a difference in abundance for hermit thrushes, Cassin's finches, and pine siskins between meadow edges and clearcut edges. 2) Table 5 of the study showed that both spruce-fir species richness and abundance differ significantly with patch size Since fragmentation produces changes in patch size, there could be changes in *species richness and abundance. 3) Table 8 shows that 7 of the 14 species that had* adequate sample size, are influenced by patch size or amount of edge. This means that 50% of these species can be expected to be influenced by fragmentation. 4) Table 8 says that white-crowned sparrows decrease in frequency with patch size. This seems to contradict the conclusions found on page 18 which says that white-crowned sparrows were more frequent in the smaller patches. 5) Two field seasons should be the minimum before making management policy based upon the**

study. 6) To evaluate fragmentation effects, nesting success must be determined; not just the presence or absence of individuals. 7) The study should be redesigned to measure biodiversity, edge and area effects, and nesting success in true old-growth forests. 8) There was no attempt to look at adjacency of habitats. 9) To determine area-sensitivity a wide range of size classes must be included as area-sensitivity may only appear in much larger patches. A representative sample of the natural distribution of patch sizes should be included before conclusions of area-sensitivity can be made. It would seem that based upon Carter's study, forest fragmentation might be expected to have significant impacts on spruce-fir birds

The work done by Carter was never cited as a justification for anything It was used to display to the reader what we knew about spruce-fir neotropical migrant birds and the possible consequences of potential activities based upon that knowledge That is simply employing the best local information available to help in determining the impacts to a particular resource

1) While it is true that only natural edges were studied, as Carter states in his report (page 3), it was his belief that the unmanaged situation needs to be understood before we can judge if human-altered landscapes can be considered appropriate surrogates We feel that the results can be extrapolated to the managed forest because the preponderance of timber harvesting scheduled for the Forest is group selection (DEIS p 3-162) which will result in very "soft" edges on the landscape similar to the types of edges studied. In addition as a result of the method used to place the transects there were some sampling within areas that had been logged and some areas that were near roads As shown in Tables 6 and 7, in neither case was there significant difference with respect to those two landscape features

Carter co-authored two additional studies since the publication of the draft One was similar in design to the cited study, but was conducted in the mixed conifer forest and the other was in a spruce-fir stand that had been harvested using the group selection method The mixed conifer study yielded similar results to the cited study The other study found no significant changes in species richness or abundance between the harvested groups and unharvested stand surrounding the groups. Both studies will be discussed in detail in the Final A review of the Keller and Anderson citation shows the Cassin's finch and pine siskin were more common in the created edge (Table 4, p 62) The commentor apparently mis-read the Table since the abundance of hermit thrushes were not significantly different between the two types of edges

2) There is indeed some significant differences with respect to patch sizes However, for both richness and abundance the values for the largest and smallest patch sizes did not differ significantly As discussed in 7 14, timber harvest activities on the Forest do not necessarily alter patch sizes or amount of edge The bigger concern would be a alteration of the overall distribution of patch sizes on the Forest We feel we have addressed that potential problem by our Plan Guideline that seeks to mimic the reference area landscape, including patch size distribution

3) Table 8 shows that of the 7 species spoken about, 5 respond positively to smaller patches and/or more edge One (golden-crowned kinglet) showed no clear preference for a particular sized patch and it preferred the shape (double) with an intermediate amount of edge One (hermit thrush) was most frequent in medium sized patches with edge

4) There is no inconsistency with the statement about white-crowned sparrows and Table 8 Table 8 says that the sparrow decreases with patch size and the values given show that as the patch size increases the frequency decrease, just a different way of expressing the same data

5) As explained in the first paragraph, this study is not making management policy, it is only be used to help understand the potential impacts to neotropical migrants

6) We agree that it would be helpful to have nesting success data However, the study was done at the peak of breeding and territory establishment which would reduce the incidence of gathering information on non-breeders which might have been forced into habitats not conducive to successful breeding. There is no body of research which has discounted the link between presence/absence and nesting success (Mike Carter, personal communication) Even if there was some non-breeders encountered, it is important to know which habitats they use since it is still valuable for the species as a whole

7) We feel that the study can help in learning about the late-successional forest and bird relationships Given the large amounts of late-successional forest that is on the Forest and will remain throughout the planning period, we do not feel it is necessary to expend scarce dollars on trying to further refine the study to look at the old-growth component of the late-successional forest since it is at low risk of being altered on the Forest

8) Because the Forest is so patchy, it would be difficult to determine adjacency and even more difficult to determine the effects of adjacency on bird species and bird communities

9) We disagree The study looked at patches of all sizes and did not find any strong correlation between bird presence and the larger patch sizes Given the sampling effort it is probable that there would have been such correlation detected if it was present

The commentors' tone suggests they feel that the data present in Carter's study demonstrate that species are adversely impacted by smaller patches and more edge, especially hard edges As pointed out above, the reverse is the case, those species that showed a response to patch size and/or edge reacted positively to smaller patches and more edge. The species cited as possibly being impacted by logging would be responding to a loss of habitat structure, not fragmentation

7.123 **Keller (1987) and Keller and Anderson (1992) showed that there was a difference in abundance between meadow and clearcut edges for three species. This suggests an edge effect from timber harvesting. They also showed that several subalpine forest birds are significantly affected directly by forest fragmentation. However, their study only looked at group selection and strip clearcuts, not the traditional shelterwood or clearcuts that are the predominant forms of cutting on the Forest. Thus, we do not know the impacts for the other forms of forest fragmentation.**

As explained in 7 14, the cited studies looked at conditions much more dramatic than proposed for the Forest As stated in Keller and Anderson, page 62, the response to fragmentation did not appear to result from simple preference or avoidance of forest edges or interiors Rather the species seem to be responding to the presence or absence of habitat structure, which is consistent with the conclusion reached by Carter's work cited in the DEIS. A review of the studies does not support the commentors contention that several birds were significantly impacted The abstract in Keller and Anderson states that of the 16 bird species brown creepers and hermit thrushes were the most negatively impacted and pine siskins the most positively impacted Three out of sixteen does not seem to indicate "several " On page 64 it is stated, results suggest that forest tracts interspersed with clearcuts have different abundances of only a few species compared to uncut forest tracts Again, we do not see how "several" species could be interpreted from the study As shown on page 3-162, the predominant timber harvest method will be group selection We share the commentors concern about the lack of studies of the potential impacts of the various types of activities conducted on national Forests

7.124 **The statement on page 3-109 about the patch size distribution fails to acknowledge the hard edges created by roads.**

The spatial model was never intended to assess roads since it was based upon undeveloped landscapes We will be handling the issue of roads by using the analysis technique discussed in 7 1 As stated in 7 122, Carter's work did take a cursory look at the

impacts of roads on abundance and did not see any The additional work done in the mixed conifer did the same and had the same results It seems reasonable that a potential surrogate to the hard edges of roads could be the hard edges of clearcuts See the response to 7 123 for a discussion on some studies which looked at those types of hard edges They did not find a major impact to species abundance

7.125: The citation attributed to Reese and Ratti (1988) on page 3-109 can not be used to support the Forest's contention that the impacts of fragmentation seen in the Northeast and Pacific Northwest can not be extrapolated to the Forest Reese and Ratti also stated some concerns about the lack of studies in western coniferous forests. The DEIS omitted the statement the statement that on western forests the lang term impacts of habitat modification, patch-size reduction, and patch isolation may not yet be apparent. The DEIS also omitted extensive discussion regarding the important differences between natural and induced edges. Since their publication, we do know have studies (Keller and Anderson 1992, Crompton 1994) which clearly show that fragmentation by timber harvesting and road building does have adverse impacts on native biological diversity.

The intent was not to suggest that Reese and Ratti's conclusion be used to support the Forest's contention Rather is was cited to follow-up on the point that the Forest is naturally patchy and what that might mean with respect to how the species of the Forest have adapted to the plethora of edges The reason we did not use the statement about the lack of long term impacts was that we felt we adequately addressed the three attributes cited as they pertain to the Forest The discussion about the different types of edges was omitted for the same reason, but we will be adding to the discussion of edges in the Final See 7.14, 122 and 123 for a discussion on Keller and Anderson, and Crompton

7.126 The problems associated with the Fragmentation and Connectivity analysis can be remedied by doing the following: 1) use a new set of maps that have the corrected boundaries and structural stage, 2) do all the analyses of fragmentation for all forested landtypes and stages, 3) quantify the land area affected by harvesting and roads, and show the amount of edge created, 4) determine the effect of the roads on patch size, 5) use the critical measures of forest fragmentation, 6) do the analyses on a watershed-by-watershed basis, 7) do a more thorough review of the literature on the effects of roads and timber harvests on biological diversity, and 8) if the Forest determines that forest fragmentation is having a significant impact consider remedies to counter it (e.g., road closures, alternative silvicultural strategies).

1) As discussed in 7 121, we feel that we are using the best data set we have 2) See Eco 168 3) see 7 119, 4) See Eco 166 5) See Eco 168 6) See 7 128 7) We will do as much as we can in the time allotted 8) There are Standards and Guidelines already in place which will minimize the potential for any of the activities to create a fragmented or hostile matrix as discussed in 7 14

7.127 Questions which animal's abundance diminishes on intensively managed landscapes.

As stated on page 3-209 of the DEIS, the cited bird study found that the most important habitat attribute with respect to species abundance was structural class Some of the species (i e , brown creepers and golden-crowned kinglets) were only found in the late-successional forest If the intensively managed forests dramatically reduced the amount of the habitat attribute then it is highly likely that those two species would be removed from that area Other species which would probably display a similar response to large losses of the late-successional forest are shown on page 3-121, table 3-25 of the DEIS They would be those which are found in a forested LTA and the numeral 5 in parentheses

7.128 **The Forest should have analyzed fragmentation at a watershed or smaller scale. Dobson (1995) would be a starting point since it showed that there are eleven watersheds of concern because of overharvesting. By not going to a smaller scale, the Forest has masked and diluted the effects of fragmentation.**

The question of appropriate scale is driven by the species of interest The mobility of the species should help determine the scale of analysis the more mobile, the bigger the scale

As stated in 7 14, the intent of the analysis was to determine where there might have been habitat islands surrounded by a hostile matrix that precluded movement between the habitat islands Since there were very few acres that might have produced a hostile matrix and the majority of the wildlife species are mobile, it was felt that the Forest scale was appropriate To better demonstrate that point we will be doing a road analysis (7 1) that should reveal the roaded "hotspots" and will produce a map that shows the spatial nature of the clearcut and overstory removal harvests What it will show is that there are no barriers to movement, either around or through, any particular watershed for the majority of the wildlife species on the Forest

In addition, the spatial Guideline described in the Draft Plan (pp IV-34 to 36) will be employed to help design projects that will maintain or restore the landscape patterns The less mobile species might be impacted, but the assumption is that there is plenty of nondeveloped habitat available to sustain them Dobson's study did not make the case that there had been any overharvesting in a particular watershed Rather, it was an attempt to quantify the total amount of a disturbance in a watershed and relate it to a potential water quality concern This is not at all comparable to the analysis of fragmentation The basic premise of the study by Dobson was that a certain level of disturbance equates to a certain increase in overland flow of water which can cause problems with erosion and sedimentation This is entirely different from the fragmentation analysis which attempted to determine if there were any habitat islands created

7.129 **There are studies which clearly show (Keller and Anderson 1992, and Crompton 1994) negative impacts of forest fragmentation in the Rocky Mountain Region and cannot simply be dismissed by the Forest.**

We did not dismiss the studies, in fact the work of Keller was cited in the DEIS We did not know of the work by Crompton at the time but upon review we do not find that it offered anything which would refute our conclusions See 7 14, 122 and 123 for a discussion on Keller and Anderson, and Crompton

7.130 **It is not acceptable for the Forest to lump old-growth into the category of late-successional. The rationale given is weak. Of the "many" species said to occur in stage 5 through stage 4B, based upon Hoover and Wills (1984), many are habitat generalists. Only three (goshawk, pine martin, and three-toed woodpecker) could be considered old-growth species. The DEIS also failed to disclose the uncertainty of the structural stage association in the cited work of Hoover and Wills**

The point of the effort was to show, based upon the best information available, that there was little difference in the species composition between the various structural stages Just because many of the species happen to be habitat generalists does not detract from the inference The commentor has failed to provide evidence that there are old-growth obligates In fact, of the three species cited, all of them have values of 1 or 2 for structural stages 4C and 4B, meaning that these stages provide important habitat for them That would seem to indicate that they can exist in a variety of structural conditions The reason we did not mention the uncertainty was that the majority of biological studies involve a level of uncertainty

7.131 LTAs and cover type should be used in conjunction.

We agree and have used both as shown in the DEIS pages 3-120 and 128 through 131

7.132 The Forest has not adequately addressed the requirements of the marten in evaluating old-growth habitat quality, quantity and/or distribution and has failed to ensure the maintenance of marten populations. Ruggerio et al. (1994) state that the marten is not believed to be secure throughout its range Appendix F-8 states that marten were "often" seen during DOW's wolverine study; but they used baited stations which are unreliable because they can learn the locations and come back regularly.

See response to 7 16 The study done by Ruggerio commonly speaks to late-successional or mature coniferous forests with complex physical structure near the ground This seems to confirm the Forest's decision to focus upon a particular forest structure that is best approximated by the late-successional grouping (DEIS p 3-120) With respect to the DOW's work, the "often" refers not only to visits to a particular station, but also the fact that they were seen at many different stations throughout the Forest Dave Kenvin, the DOW biologist who conducted the study, felt that martens were seen on about 80% of the bait stations over the three year study that covered about 500 square miles The Draft was in error by talking about just the 1993 study when in fact work was done in 1992 and the winter of 1994-95 The Final will be corrected to show the three years of study The commentor implies that the bait stations would over estimate the presence of martens This is not support by research conducted in Oregon with similar vegetation, which found that bait stations were not as effective in detecting martens as winter tracking or track plates Bull et al (1992) This suggests that martens could be even more plentiful then suggested by the data gathered

7 133 The three-toed woodpecker should be a management priority since it plays a major role in controlling insect populations.

As a designated sensitive species it is a management priority

7.134 Both the brown creeper and three-toed woodpecker typically exist at low densities. Both species have highly specialized habitat requirements and are highly susceptible to management activities Given the flaw in the Forest's old-growth and fragmentation analyses, these species are highly vulnerable and could be headed for a train wreck.

We disagree, see 7 17 In addition, two facts need to be emphasized First, a majority of the late-successional fores will remain unaltered by human activity As shown by the work of Carter and Keller and Anderson (discussed previously) the primary habitat attribute is the older forest structure so the risk from human activity is low Second, natural disturbance processes will be allowed to dominate the landscape for the majority of the Forest This will provide numerous opportunities for insect and disease, and fire created habitat to be located across the Forest

8. Water

8.1 Where is specific direction for protecting soil, water, and wetland/riparian areas?

Many comments said protection measures for soil, water, and riparian resources were too vague, that there were major omissions, and that by relying on the draft Watershed Conservation Practices (WCP) Handbook, direction was not binding The draft plan did

include broad standards from the Handbook, but did not include the more specific design criteria.

The final Forest Plan has incorporated all Regionwide Watershed Conservation Practices (WCPs) as standard direction to protect soil, aquatic, and riparian systems from all land-disturbing actions. The WCPs include 16 standards and 69 design criteria These management requirements were developed over several years with input from Federal and State agencies and public interests They are standards and guidelines that exceed State Best Management Practices (BMPs), which do not cover all Forest Service actions They are backed up by research and field experience Comments specific to WCPs have been directed to the R2 Regional Office.

The entire Watershed Conservation Practices Handbook is too long with its rich background and supporting text to be included in the Forest Plan The Handbook will also be binding direction once final The DEIS explained that the Handbook was out for public review and described how to get a copy for those interested in reviewing the entire document

8.2 How are watershed condition and cumulative impacts being assessed?

The amount, type, and location of land disturbances relative to streams and sensitive areas is assessed in each watershed. Existing information from maps, photos, and experienced field people is used to rank watershed condition based on stream, soil, and riparian conditions All disturbances that might affect watershed condition are assessed as much as existing information allows For example, all inventoried roads are included, some of which are closed and volunteer two-tracked roads Watershed condition information is used to set priorities for field surveys and restoration work

Disturbances were assigned disturbed area factors (DAFs) DAFs relate severity of disturbance Roads significantly reduce infiltration capacity and were assigned a DAF of 1 0 DAFs less than 1.0 were assigned to disturbances that are less severe than that caused by a road DAFs were calculated using established Soil Conservation Service runoff curve number methodology.

Acreage of each disturbance was multiplied by the respective DAF so that each disturbed area could be reduced to an equivalent roaded area All disturbances were added *together to get total disturbed area for each watershed*

All known disturbances were part of this assessment unless their impact on soil infiltration was so slight, a 10 year, 24 hour rainfall event could be absorbed Major landslide areas did not contribute to watersheds of concern, because they were not caused by management activities

8 3 Will Wolf Creek Ski Area expansion be covered in the Forest Plan?

Expansion of Wolf Creek Ski Area is a possibility The Ski Area would have to submit a Master plan prior to Forest Service approval A full assessment of impacts would be made at that time

The DEIS did not say that the Wolf Creek Ski Area is currently out of compliance It said that a recent Forest priority has been bringing the Ski Area into compliance

8.4 Does the Forest Plan discuss timber harvest and water yield?

Yes *The EIS quantifies total water yield and water yield increase by alternative* Alternative A shows no water yield increase because no timber would be harvested Since water yield is addressed at the Forest Plan level, it will not be addressed at the project level except in rare situations See pages 3-220 and 3-228 through 3-230 in the DEIS

8.5 Are reference streams impacted? How will they be used?

Reference streams are used to assess stream health Impacted streams are compared with reference (least-impacted) streams of the same stream type in the same physiographic area Comparisons are made as exact as possible by reducing natural variation Management effects get the focus Many reference streams are not pristine but have been affected by natural or human disturbances They do represent the best range of stream conditions that are available today New reference streams will be added as good candidates are found

The DEIS describes 3 ecological sections that lie within the Rio Grande National Forest boundary, the Sangre de Cristo range, the San Juan range and the San Luis Valley The San Juan Section defines the physiographic area where most Forest management activities will occur Stream health characteristics are likely to differ between different physiographic areas

A menu of stream health metrics is used to assess stream health These metrics focus on bed, bank, and water quality factors If only one metric is out of balance, then stream health is judged to be impacted The Region is working on a paper that tells exactly how these metrics can be used to rate stream health

Stream health data are used to assess watershed condition and evaluate the effectiveness of watershed conservation practices at the project level This realistic approach is used in many places to meet the goal of the Clean Water Act to restore and maintain the chemical, physical, and biological integrity of water

8.6 Will recreational impacts cause water quality problems?

The EIS discloses effects on water and riparian areas from recreational activities Effects will be minor if watershed conservation practices are used Exceptions occur where users do not comply with regulations, such as off-highway vehicles (OHVs) that trespass off of designated travelways The Forest does not have enough people and money to prevent all such violations Some problems will occur

Relative risk between alternatives from recreational impacts to water quality and stream health are described Alternative D has the most risk This was explained as resulting from more land being allocated to recreational uses and therefore greater exposure to recreational activities

Some comments used various research studies to support the view that off-road recreation, especially OHVs and snowmobiles, damage water and riparian areas In nearly every case, references cited did not clearly address these types of impacts and were not very relevant

One comment stated that OHV impacts depend on intensity of use Use will be tempered by restricting OHVs to designated travelways except to retrieve game Another comment said that snowmobiles can contaminate snow with lead, but since leaded fuel is not available and snowmobile use is scattered, this effect will be negligible A third comment concerned vegetation damage and snow compaction by snowmobiles The areas affected are so small and scattered that effects on water and riparian areas will be negligible

See pages III-17 of the DEIS for an example of recreation impacts that would warrant evaluation and follow-up management

8.7 The DEIS explanation was not complete or was unclear

Language will be added to the FEIS or changed for clarification

8 8 Will watersheds and streams be managed so that disturbances are within the natural range of variability?

Management disturbances will be tempered by Watershed Conservation Practices, so that watersheds stay within a balanced range of conditions between extreme natural events such as major floods or fires Some streams are outside this range due to past impacts such as mining and will be restored as funds allow Other streams may be deliberately managed outside this range by reservoirs or trans-basin diversions authorized by law

Natural range of variability study conclusions are listed on page 3-223 of the DEIS No additional conclusions could be reached

8.9 What is being done to bring Kerber Creek, Willow Creek and Wightman Fork back into the natural range of variability? How are sediment sources in Chama Basin being treated?

Please see page 3-222 and 3-218 of the DEIS

8.10 Why did the DEIS mention the American Rivers assessment of the Rio Grande?

American Rivers named the Rio Grande as the Continent's most endangered river It seemed worthwhile to mention up-front that Rio Grande National Forest lands have not contributed to that dubious distinction.

8.11 Will the watershed assessment establish a threshold of disturbance that cannot be exceeded?

The Forest initially considered establishing an upper limit on the amount of disturbance allowed in any watershed The intent was to prevent problems from occurring That approach was explained in a white-paper and distributed for review prior to publication of the draft Forest Plan Criticisms that a threshold would not always be accurate could not be refuted

In any watershed, streams can be degraded once disturbances exceed a certain level This point varies between watersheds, and within the same watershed depending on where disturbances occur Disturbances on ridges usually impact streams less than those next to streams Such processes are complex No one natural threshold exists

The disturbance threshold concept was dropped before the DEIS was published. In its place, levels of disturbance were used to identify watersheds of concern where streams might have problems Land disturbances and sensitive areas were used to flag watersheds of concern where streams may have problems The streams can be field surveyed to see if problems actually exist

8.12 What is acceptable in watersheds of concern?

Decisions on how to manage these watersheds will be based on field surveys that will verify actual watershed condition In the meantime, no new disturbances that might degrade stream health or impede watershed recovery may occur Field surveys will help decide long-term management

8.13 Is the watershed assessment approach fatally flawed?

One commentor dealt extensively with the Forest Plan approach to watershed assessment The basic premise behind those comments was that a disturbance threshold should not be used to drive management decisions Even though the threshold concept was dropped before the DEIS was published, this response will deal with each of those comments

Our approach is sound It is a cause-effect assessment, not a model It is based on the type and amount of land disturbances that might affect watershed condition and stream health Location of disturbances relative to streams and sensitive areas is also considered as much as possible Watershed condition affects stream health Levels of concern reflect our professional judgment, based on research and experience, that risks of degraded stream health are substantial.

Our watershed assessment properly focuses on activities, or parts of activities, that damage streams directly or impair ability of land surfaces to absorb water and filter sediment

8.13.1 Is there any value to assessing level of watershed disturbance?

If watershed condition was only based on stream health, it would be difficult to anticipate problems Evaluating watershed disturbances allows some ability to forecast potential impacts to the stream Forecasting is important, because it is easier to prevent problems than it is to repair them Dunne and Leopold, in Water in Environmental Planning, said "Planning should include in its domain the forecasting of effects " (page 493)

8.13.2 Is there a connection between watershed condition and stream health?

Watershed condition affects quantity and quality of water draining from the watershed To protect water quality and stream condition, one must protect the watershed first When hillsides are disturbed, vegetation can be removed and soil can be compacted This can cause less water to infiltrate and more to run off the surface carrying soil with it This is nothing new In 1937 the U S Department of Agriculture wrote a technical bulletin describing soil erosion and streamflow on range and forest lands in the upper Rio Grande watershed (Cooperrider, 1937) They documented that flooding, erosion, and a decline in water quality stemmed principally from human disturbances in the watershed causing a decline and change in natural vegetation Other research papers substantiating similar findings are numerous (e g Dunne & Leopold, 1978, Harr, 1976)

8.13.3 How are disturbance levels derived?

The Forest Service has Handbook direction to limit compaction within any land area to 15%, in order to protect soil productivity Harr's work provided an estimate of the amount of disturbance (compaction) that can begin to affect stream conditions Together they provided background for concern levels the interdisciplinary team established

8.13 4 Why didn't the watershed assessment consider position of disturbances relative to stream channels, severity of different kinds of impacts, or how different kinds of stream channels respond to disturbances?

The DEIS did not include an assessment of disturbances relative to stream channels, because the Forest did not have needed computer capability The Forest now has that ability and the Final Plan includes an assessment of disturbances relative to stream channels

The watershed assessment considers severity of different types of disturbances Disturbed area factors are used precisely for this purpose

As explained on pages 3-224 through 3-228 of the DEIS, watershed disturbance assessment is only one part of the total assessment Watershed assessment directs our attention to streams for further assessments Stream health measurements are tied to stream classification, making them directly related to stream capability With this approach, the current condition of a stream can be assessed and the potential affect of all disturbances (past, present, and future) on the stream can also be anticipated

Conservation practices are required to minimize impacts We must assess effectiveness of these practices

8.13.5 Why did the DEIS include disturbance from increased water yields?

The Forest has been criticized in the past for not assessing the impact caused by increased stream flow Stream flow is increased when trees are removed from a watershed Increased stream flow can cause channel erosion

Channel scour is not a disturbance type that can be directly related to compaction or infiltration capacity, so it is not easily fit into our disturbance assessment We devised an index by estimating the acreage of tree removal that would increase stream flow enough to produce the same amount of sediment from stream scour that an acre of road would produce

After further consideration, the Forest feels that this is unnecessary Research shows that increased runoff and sediment produced by soil disturbances are the major cause of stream impacts Aggressive tree cutting has been shown to increase small peak flows and channel erosion, but stream health has not been damaged if watershed conservation practices were used

The final Forest Plan watershed assessment does not include water yield increases as a disturbance type Instead, water yield increases have been estimated by watershed A concern level has been established that will prompt us to look closer at streams with high amounts of timber harvest to see if increased stream flow has caused stream health problems.

8.13.6 What types of vegetation removal were considered to increase stream flows?

Cutting of trees, even partial cut harvesting, has been shown by research to increase stream flow in average moisture conditions In all cases where trees were removed (fires, pipelines, etc), associated acreage contributed to affects from increased stream flow

8.13.7 Why did Forest Plan watershed assessment generalize conditions across the Forest?

Time did not allow site specific information to be used during Forest Planning For example, hydrologic soil group B was used throughout the assessment This was based on a forest-wide assessment which showed most soils to be of that type

Project level analysis will be able to assess site specific conditions in much more detail than was possible at the broad scale necessary for Forest planning Project level assessments completed so far have not required us to deviate from hydrologic soil group B

Similarly, generalizations were made in quantifying disturbance from past timber sales For example, we assumed the only disturbance related to old clearcuts was that associated with roads There may be more disturbance than just that caused by roads For past partial cuts, we had actual data collected by our soil scientist for one timber sale area That data was extrapolated to other partial cuts Again, it is not possible to know exact conditions on each piece of ground throughout the whole forest at the broad scale of assessment required for Forest Planning

8 13.8 Did watershed assessment consider site recovery after disturbances occurred?

Recovery from past disturbances was accounted for in many ways Increased water yields were diminished over time, assuming full recovery after 70 years The only disturbances included for old clear cuts were roads that still showed up on current color infrared aerial photos For partial cuts, data was collected on old harvest units that had several years of recovery

8.13.9 Did watershed assessment consider watershed sensitivity?

Some watersheds are more susceptible to disturbance than others We called this sensitivity It seemed logical that soils with high erosion hazard class would be more susceptible to disturbance impacts than soils with a low erosion hazard class We wanted to be especially careful about disturbing watersheds that have a high percentage of the area in this susceptible condition So watersheds that had more than 70 percent of the area in high erosion hazard class were given a little more protection by using a lower disturbance level to indicate a risk concern

Other indicators of susceptibility were considered For example, mass movement potential was considered but was already included during delineation of suitable timber lands An interdisciplinary team approach, using professional judgement, was used to identify sensitivity The Final Plan has also used drainage density as an indicator of watershed sensitivity

8.14 Do standards apply to all streams or just waters of the United States?

Waters of the United States include all perennial and intermittent streams and their tributaries (40 CFR 230 3) Standards dealing with waters of the United States apply to all streams

8 15 Why does the Forest only plan to monitor a few streams?

Monitoring every stream would be impossibly expensive We will monitor selected streams that are most likely to show an impact, where the knowledge gained is most likely to improve protection over a large area This approach will gain the most from our limited resources See the Nonpoint Source Management Strategy in the Watershed Conservation Practices Handbook

8.16 Are roads scheduled for reclamation and will timber harvest be delayed in watersheds of concern?

Not yet If field surveys show that watershed condition is degraded and that road reclamation would help improve the condition, then road reclamation will probably be part of the restoration program for that watershed

The FORPLAN model delays timber harvest in these watersheds because we do not want to have an over-inflated ASQ and be forced to disturb them if field surveys find that they are in a degraded condition However, the decision on whether to actually harvest timber in these watersheds will be based on such field studies, and some of them may end up having timber harvest in the next 10 years These FORPLAN constraints reduced the ASQ by less than 2% *

8.17 How are grazing impacts on watershed function assessed?

Acres of rangeland in poor condition were one category of land disturbances used in our watershed assessment This assessment does not give total sediment generated from grazing It does identify watersheds that we judge to be at risk from all disturbances, including livestock grazing Stream surveys will be used to refine this information and identify any restoration needed

8.18 How does timber harvest relate to watershed disturbance?

Timber harvest can increase stream flows, which can erode stream channels Flow increase is seldom detectable until 25% of the basal area of a forested watershed is cut Research suggests that sediment increase is not detectable until more than 40% of the basal area is cut using carefully designed roads and skid trails If watershed conservation practices are

used, effects on stream health should be minimal Our watershed assessment focuses on activities, or parts of activities, that damage streams directly or impair the ability of the land to absorb water or filter sediment

A watershed of concern will be identified if we reach 25% of basal area removed This will direct us to streams that could be impacted from increased stream flows to see if any evidence exists

To estimate water yields we assumed that increased stream flow is directly proportional to basal area removed (Troendle, 1986) It is true that if clear cuts are greater than about 15 tree heights long, wind scour will remove snow that would contribute to stream flow We *did not have that data to include and may have overestimated amount of increased water* yield which should not be a problem for 2 reasons 1) The concern level would be reached sooner, putting us on the safer side of watershed protection and 2) a watershed being over the concern level forces us to look closer at the stream to see if it has been impacted. So we may be forced to assess stream health a little sooner than we really need to

8.19 How do wild and scenic river designations relate to instream flow water rights?

There is no relationship between instream flow water rights and streams that have been identified as eligible for wild or scenic river designation Such a relationship can only be established when Congress passes a law designating a wild or scenic river and specifies that instream flows be obtained Wild or scenic river designation does not affect already-decreed water rights

8.20 How will you deal with watersheds that have more disturbance than shown in the Forest Plan, since your roads are not totally inventoried?

Field surveys will be used at the project level to refine information on disturbances and stream health

8.21 Why doesn't the monitoring section list watersheds that will be monitored through the life of the plan?

We will monitor selected streams that are most likely to show an impact No one knows now which watersheds will be involved The monitoring schedule says it will be done for each EA for land disturbing activities

8 22 Why doesn't the Forest Plan contain more data and the results of Watershed Improvement Needs Inventories?

People want far more information than we can get It would be nice to have all the data on resource conditions and impacts that we want as well That will never be possible Our Watershed Improvement Needs (WIN) Inventory data is not yet complete, but is ongoing This WIN inventory will focus most on watersheds of concern and will identify specific restoration needs to improve their condition The Forest Plan is not the place for this type of detailed information The FEIS will more thoroughly explain use of the WIN inventory and ongoing restoration activities.

Watersheds of concern have been identified and will be on a map in the FEIS along with reference streams An inventory of riparian condition is not available at this time, data gathering is on-going Similarly, rangelands in degraded condition have not been mapped across the Forest Unauthorized motorized vehicle use is dispersed and dynamic, changing as people violate Forest direction, generally occurring on nonforested, lower elevation land with gentle slopes

8.23 How will the Forest acquire instream flow protection?

Instream flows can be protected through water rights or bypass flows Water rights must be obtained under State law, and will generally be achieved through negotiated settlements with affected water users Bypass flows can be put into special-use permits as permit conditions, but policies are being reviewed by a national task force mandated by the Farm Bill Until they make a recommendation and it is adopted, bypass flows must be based on negotiated agreements with affected water users

9. Soil Resources

9 1 There is a need to identify soil-resource priority recovery areas by District.

The Watersheds of Concern section in the EIS adequately describes at the planning level the watersheds that need improvements Appendix J of the FEIS and the "Watershed Risk Assessment" portion of the Water section adequately describe the analysis of watersheds needing extra mitigation

The Forest does produce maps as part of the Watershed Improvement Needs Inventory it conducts annually on watersheds of concern This activity is project-level and not appropriate for Forest Plan-level analysis

9.2 Soils are nonrenewable. This fact needs to be emphasized in all projects.

We agree that soils are nonrenewable, this fact is included not only in Planning documents but also in the project-level soils-analysis decisions

9.3 Will the burning of slash piles be allowed, considering its impact on soils?

Slash burning will still be allowed under all alternatives

There are two components that are normally burned, fine materials (branches and limbs) and coarse woody debris (> 3-inch diameter) The Forest's policy is to discourage burning the fines, because of their rich nutrient concentrations and the loss of site nutrients Coarse woody debris has a lower concentration of nutrients, and may need to be burned if the woody materials contain disease or insects that might be a problem The Forest would rather see coarse woody debris used as firewood, and usually makes that opportunity available after timber sales

Air quality is also a concern from when burning slash piles

9 4 What is the schedule for soil-quality monitoring going to be on this Forest?

The Monitoring chapter of the Plan (Chapter 5) describes the soil-quality monitoring we plan to conduct over the next decade The Forest is committed to greater use of monitoring and evaluation data, and using the information to make adjustments in management when needed

9.6 Driving Off Roads and Erosion.

The soils section in chapter 3 entitled "Effects on Soils from Travel Management" discusses the effects of off-road vehicle use Soil compacted by vehicles does not return to natural conditions While some regrowth may occur in lightly compacted or uncompacted portions of roads, they generally need to be ripped and re-seeded for plants to grow

9.6a Suitable Timber Lands The conclusions from Soils writeup relative to timber suitability are greatly oversimplified and underestimated. They rely on

extrapolation. A more detailed study of soils is required. Why were soil units 750M and 460 not excluded from the suitable-lands base in the Cumbres and La Manga Pass areas?

The Forest has completed its Soil Resource Inventory (SRI) which estimates and predicts responses to management activities, and includes soil suitabilities, limitations, and potentials The SRI has quality control from review and participation in the National Cooperative Soil Survey, which contains national standards and criteria for soil interpretations

SRI's are intended to provide planning-level information The Forest has considered soil capabilities in meeting the requirements of the NFMA regulations, specifically, CFR 219 14 (a) (2), that "Technology is available to ensure timber production from the land without irreversible resource damage to soils productivity or watershed conditions "

We have more than adequately described in the EIS and references which soils would not meet suitable-lands criteria (please refer to the Tribble, 1993, available upon request, and to the EIS, Timber and Soils sections) The Soils information used is not oversimplified, nor does it underestimate effects, and it meets the intent of the regulations cited above

The respondent asks for more detailed analysis The Forest will do more detailed soil analysis at the project level when projects are proposed If any additional concerns arise during the project stage, adjustments in the projects will be made accordingly

Soil units 750M and 460 were not excluded from the suitable-lands base in the Cumbres and La Manga Pass areas because they are more stable than those same units in the Chama Basin This is well described in Tribble, 1993

9.7 **The Respondent is not comfortable with the bare-soil and erosion estimates, steep slopes, and the fact that no attempt has been made to quantify soil-erosion caused by roads. The analysis underestimates the potential for long-term erosion.**

The respondent is concerned about bare soil and erosion on slopes steeper than 40 percent The data presented are based on the Modified Soil Loss Equation model, which we use as a tool

The Forest has described the effects of timber harvest on erosion in Chapter 3 of the EIS The amount of erosion from roads depends on a number of factors, including soil erodibility, surfacing, drainage, grade, traffic, and revegetation of cutbanks and fill slopes Because of these variables, we did not estimate tonnages of erosion The amount of roads constructed or reconstructed gives an estimate of disturbed area and this has been adequately described in the FEIS, in Effects on Soils from Roadbuilding Roads represent a permanent and dedicated use, and the effects of erosion from roads can be mitigated as described in the Standards and Guidelines

9 8 **The first part of this respondent's letter defines the purpose for which the Forest Service exists. The respondent summarizes the Organic Act, "...to improve and protect the Forest within the boundaries, or for the purposes of securing favorable conditions and water flows, and to furnish a continuous supply of timber for the use and necessities of citizens of the United States." This language makes clear the founding purposes for the Forest which this EIS and Plan must address.**
First of all, to summarize the purpose of the Forest by citing one legal statement from the Organic Act is myopic, and ignores the plethora of laws that have since been passed that govern the use and management of the nation's forests We suggest the respondent read the rest of the "Legal Requirements" sections of the EIS, besides the ones in the Timber section, and become acquainted with the numerous other legal mandates (such as the Clean Water Act, Multiple Use Sustained Yield Act, National Forest Management Act,

Endangered Species Act, Leasing Reform Act, and others) directing and affecting resource management on this and other National Forests

Another excellent reference is "Principal Laws Relating to Forest Service Activities," a 3-inch-thick USDA publication available from the U S Government Printing Office, Washington, DC 20402-9328, describing those numerous laws.

9.9 **The respondent takes issue with the concept of "soil health" as discussed in the EIS. The respondent claims that "living organisms have health, not abiotic elements." The respondent is concerned that soil health is a relative concept that could be prone to subjective interpretation.**

Soil consists of living (biotic) and nonliving (abiotic) materials Ecosystems consist of the abiotic physio-chemical environment and the biotic assemblage of plants, animals, and microbes (Kormandy, 1969)

Ecosystem health is a contemporary concept that refers to the sustainability and long-term protection of ecosystem function, structure, and composition The Forest believes that while the concept of soil health has not been proposed elsewhere in the literature, the concept is a subset of ecosystem health, is an innovative concept, and is no less valid than ecosystem health

Regarding subjective interpretation, soils are perhaps more suitable for reasoned scientific decisions than other disciplines, because many of the parameters that define them are scientifically measurable and quantifiable These include measuring soil-health factors such as compaction (loss of soil structure, aeration, and infiltration), soil erosion, puddling, and displacement Not only are they measurable, but they have tolerances, as well

Nutrient conditions, microbial populations, and energy flows are complex, and not as measurable We cannot avoid critical decisions, however, because of complexity or insufficient data Instead, we need to use technology, research, experience, and judgement in deciding our course of action We use the interpretations of the National Cooperative Soil Survey, or ones developed locally, to make such decisions on soil quality and health

9.10 **The respondent noted that the citation "Spero, 1994" is not listed in the literature review, and questioned the veracity of this material.**

The citation should read, "Appendix A, An Assessment of the Range of Natural Variability of the Rio Grande National Forest," and will be changed in the FEIS.

9.12 **This respondent questioned the citation of "Rawinski, 1994," which is in the text and not in the Literature Cited section. The respondent questions the validity of this report as science. Other citations which should have been listed in relation to coarse woody debris are missing.**

The Forest makes a distinction, as does much of the research, on the function, role, and purposes of coarse woody debris (CWD, materials greater than 3-inch diameter) and those smaller materials we call fine slash (branches and leaves less than 3-inch diameter) It was not our intent to focus our Literature Review on CWD, but rather on what impact the removal of fines would have on the stand We will expand our Review to include CWD, and will cite it in the EIS

9.13 **The respondent states that a DEIS quote says "the greater amount of bare soil, the greater the erosion potential," and says this statement is "simplistic and misleading." He goes on to say that he is concerned that the Soils section is biased in implying that, with timber harvest, erosion will be directly related to amount of bare soil, but**

when discussing prescribed fire, erosion depends on a number of factors. He suggests better technical writing.

The DEIS does say what he quotes Two sentences previously, however, it describes what soil-erosion factors are affected by timber harvest "The amount of soil erosion occurring within a timber sale depends on the amount of bare soil, slope steepness, slope length, inherent erodibility, and rainfall intensity " Please refer to the DEIS, p 3-240

The Forest believes the statement is accurate, comprehensive, and without bias in describing timber harvest effects on erosion The section on prescribed fire cites the same factors, with additional emphasis on organic matter, since some of it will be ignited and lost from the site

9.14 **The respondent questions the "Rawinski, 1994" citation, concerning the Forest's literature review regarding soil nutrients and whole-tree harvesting. The respondent contends there is no documented literature review to support the statement that "the vast preponderance of research cautions that whole tree harvesting may reduce site productivity by nutrient removals," as stated in the DEIS. The respondent concludes that if it is the intention of the author to imply that whole-tree harvesting reduces site productivity on the Rio Grande, then where is the specific definitive data?**

The Forest welcomes this challenge, because our literature review of the subject, spanning four years of information gathering, shows that the vast preponderance of literature cautions that whole-tree harvest may reduce site productivity by nutrient removal This review is available upon request and contains seven pages of references that caution against whole-tree logging. Only one page of references show no long-term effects under certain circumstances

We challenge the skeptics to explain why these conclusions are invalid As far as "specific definitive data" are concerned, the Forest uses the National Cooperative Soil Survey criteria in evaluating whole-tree harvesting on soils specific to this Forest The results of this analysis show that 86 to 97 percent of the suitable lands (depending on Forest Plan Alternative) have severe limitations for total-tree harvest on the Rio Grande National Forest We conclude that (1) the overwhelming majority of research does indeed point toward keeping nutrients on-site to protect soil productivity, and (2) specific soils on the Forest have been analyzed and confirm our concern

Finally, it is concerning to note that a practice (like whole-tree harvesting) is considered acceptable until proven otherwise We propose a different approach, and challenge the timber industry and its supporters to produce the list of research--with specific research on the Rio Grande National Forest--that proves that whole-tree harvesting is an environmentally acceptable practice The Forest believes the data do not exist to support the practice

9 14a Table 3-51 suddenly and without any support presents a conclusion that "the vast majority of soils on the Forest rate severe for whole tree harvest " No scientific information for this conclusion is presented and no discussion of the methodology appears

The criteria used to make the soil ratings are based on the National Soils Handbook, which contains the soils criteria used to make the interpretations The criteria have been subject to peer review nationally (The reference to these criteria is clearly stated in the DEIS on page 3-239, first paragraph) We agree to describe the USDA criteria in more detail

9 15 **The respondent makes the case that slash piling and burning on landings is detrimental. Landings would be part of the transportation system. Compaction and burning should not be a concern.**

Landings are intended to be reclaimed to grasses or forest production after use, and so any detrimental soil conditions have to be reclaimed as well, including severely burned soils when landings have had piles burned on them

9.16 Under effects on soils from fire management, there is no discussion of the same severe ratings for total-tree harvest. Certainly burning results in a loss of nutrients. This omission suggests a bias for one treatment over another

Fires, whether catastrophic in size or of a low intensity and size, are natural components of forested ecosystems at some point in their life cycle In general, nutrient losses from fire increase with fire severity

An important distinction between fire and total-tree harvesting is that, under total-tree harvest, none of the nutrients contained in the fines would remain for use by the stand Those nutrients are usually burned in hot slash piles that consume the greater portion of nutrients in them This represents a distinct net loss In low-intensity burns, some loss to volatilization occurs, but some of the nutrients in the materials burned are returned to the soil

Low-intensity burns have positive short-term effects· increased nutrient availability, and pH's are raised, releasing cations and encouraging microbial activity The long-term effects of intense fires have not been well studied (Binkley, 1986) In general, our forest management practices hope to simulate smaller disturbances, and not the large, catastrophic ones like wildfires

In prescribed fire, we can design the burn so that burns only occur during desired fuel-moisture conditions By doing this, we can ensure that the burn severity is low, and that large losses of nutrients do not occur We use this and other mitigation to keep the fire within prescription and protective of resources, including soils The Standard that requires the slash to be left in place is no different than prescribed-fire mitigation, in that it attempts to protect soil and other resources

9.17 Soils information skewed the selection of alternatives, and should be reviewed and corrected

The Soils information will be adjusted where corrections in citations or minor additions are needed It is our consensus that the essence of the soil analysis is factual, clearly presented, and appropriate for Forest Planning-level decisions Soils are one of many decision criteria used in making a selection of a preferred or selected course of action

9.18 Slash management on the Forest generated a wide variety of responses Some said we leave too little; another comment was that we should let people remove slash from a site.

Others said, "We fully support the RGNF direction to leave fine slash on timber harvest areas is it just on soils rated Severe and not left on all timbered sites?" Still others feel there is no direct and local evidence that proves that whole-tree harvesting (and slash removal) would have any effects on long-term productivity

The fact that 86 to 97 percent of the forested soils on the Forest have severe limitations for slash removal indicates that slash will be recommended for retention in the vast majority of timber sales

This issue goes back about four years ago, when the Forest began a study of the effects of whole-tree harvesting and removal of limbs and leaves from the stand The Forest developed a "Slash Team" that consisted of Fire, Timber, Soils, and other disciplines The Team met internally, but the Forest also hosted workshops with the timber industry and

field trips to see the effects The team looked at a number of alternatives to leaving slash in the forest while maintaining site productivity

The team reached a consensus on slash management which was accepted by the Forest Plan IDT and the Forest Leadership Team The agreement protects soil resources, gives flexibility to other resource needs, and proposes mitigation measures The agreement is also consistent with the Watershed Conservation Practices Standards, but would change one of the Guidelines

Our Forest Plan would include the following Standards and Guidelines (formerly design *criteria*)

Standard Prevent the detrimental removal of organic matter and nutrients from any land

Guideline a Fine slash (branches and leaves less than 3 inches in diameter) shall be left well distributed within harvested stands on those soils rated severe for total tree harvest Exceptions may occur when fire risk, attributed to high fuel loadings near private inholdings or other identified high value resources, overrides the need to leave untreated slash on-site When exceptions are allowed, mitigation measures (e g , chipping and spreading, seeding of nitrogen-fixing plants, fertilizing) will be implemented to maintain long-term soil productivity.

Guideline b If machine piling is required, conduct piling to leave topsoil in place and retain litter-humus ground cover on 85 percent or more of the area

Guideline c Align piled windrows on the contour and space windrows no more than 200 feet apart

The Standard, and Guidelines "b" and "c," are verbatim from the latest edition of the AC Handbook (September 8, 1995) Guideline "a" has been expanded and changed It shows the general direction we hope to achieve, but, as a Guideline, offers flexibility to remove slash where resource concerns are identified in the project analysis

We believe the group has also identified some very creative and protective remedial (mitigation) measures that would compensate sites for slash removals These include fertilization, broadcast burning, chipping, planting nitrogen-fixing plants, land applications, and lopping slash These options allow the Forest to address particular resource needs while protecting long-term soil and ecosystem productivity.

9.19 *Why is soil productivity less than it once was? What is being done to improve it?*

The Soils section of the EIS describes why soil productivity is less than it once was This is primarily due to erosion resulting from excessive timber harvest, slash burning, and *excessive livestock grazing*

You raise a good point here, related to our Forest goal to maintain or improve soil resources In most management activities we are focussed on "maintaining" soil productivity, We need also to work on improving soil resources

Our position on improving soil resources is to stop degradation, and allow natural soil functions to be restored We plan to accomplish this through implementation of the Standards and Guidelines Time itself improves soil resources, due to the atmospheric inputs of nitrogen, and the fixation of nitrogen by certain plants

9.20 Is whole-tree logging still allowed, in light of the research showing it may reduce site productivity? If so, how will total-tree logging systems be modified so that slash remains on-site?

Whole-tree harvesting will still be allowed In general, it is the Forest's responsibility to define the conditions it wants to achieve in the field, and not necessarily the "how to" phase

What this means is that we would continue to emphasize leaving slash in the Forest, but in some instances it could be removed, so long as other mitigation is implemented As an example, the Forest is working cooperatively with whole-tree loggers to get them to voluntarily carry (grapple-skid) the fine slash back into the stand on their return trip So far, this seems to be accomplishing what we desire, though we still need to monitor compaction effects from the return trip to the stand

9.21 What are the effects on soils from roads and trails (travel management) in the various alternatives?

The Soils section discusses the effects of travel management on soil productivity

9.22 No livestock grazing should be allowed on the 32 percent of rangelands in poor condition, until they recover. Is the soil disturbance caused by livestock within the range of natural variability? What will be done to reduce the impacts?

The EIS identifies livestock grazing as the most extensive soil-erosion concern on ranges in poor or very poor condition To address soil-erosion concerns, the Forest is proposing utilization standards that allow ecological conditions to improve toward mid- to upper-seral condition

The concept here is that a healthy plant community will protect soil resources and soil health The soil disturbance on ranges in poor or very poor condition is likely outside the range of natural variability, and would need to be improved through better livestock use and management The Forest will be conducting additional environmental analysis, including soils analysis, when allotment management plans are developed under the *Rescissions Act*

9 48 What data do you have (as required by regulations) to show that unavoidable adverse effects will not impair long-term productivity?

The section on "Short-Term Uses and Long-Term Productivity" describes how Standards and Guidelines will assure that no long-term impact occurs to soils The Soils section on "Resource Protection Measures" states the same These measures would protect long-term soil productivity and meet the intent of a number of laws, including Multiple-Use Sustained Yield Act and NFMA.

9.24 AC could be viewed as meaningless. For example, "Maintain the organic groundcover...that degrades stream health." How will the "degrades stream health" and disturbance of groundcover be measured or predicted? (078

Our intent with this Standard was to make sure that vegetative cover remains sufficient to protect stream health adequately, since there is an obvious linkage between upland soil and watershed conditions and the quality of the streams within a watershed

We can measure soil-erosion tolerances--that is, what is acceptable erosion and what is unacceptable We can measure the relative stream health by comparing certain parameters to reference areas Over time, we believe we will be able to establish linkages based on these trends and data But we do not question the obvious relationship of watershed conditions and stream health, since we believe it is well supported by the literature

9.25 What constitutes rehabilitation of roads, skid trails, landings, and drill pads? The definition of rehabilitation in the Glossary does not appear to be adequate.

Rehabilitation can vary, depending on objectives It may include seeding, waterbarring, or complete obliteration, which is "putting the road to bed" and reclaiming it to original contours After reviewing the Glossary, we agree to amend the definition, to remove the terms relative to time frames

9.26 How much organic removal constitutes "detrimental" removal? It appears to prohibit any construction of landings, roads, trails and campgrounds.

The Standard proposes to set direction on lands supporting and producing vegetation, like forests and rangelands, in order to maintain healthy ecosystems It does not prohibit removal of organic materials from areas dedicated to other uses, like long-term roads, campgrounds, and building sites "Detrimental" organic-matter removals are best defined in the soils criteria for total-tree harvest, which identify the soils on which detrimental effects could occur

9.27 Nutrients, particularly nitrogen, are almost always a factor limiting forest growth

We agree That is precisely why we propose nutrient mitigation measures such as the requirement to leave slash in the woods on soils with severe limitations. Because nitrogen is always in demand, removal of significant quantities of it through slash removal could result in impaired forest growth

9.28 The statement that "soil productivity is likely to be reduced by one whole-tree harvest in poor soils and by repeated harvests in rich soils" is a very broad, unsubstantiated generalization

This statement was in the AC Handbook While the Forest has extracted the Standards and Guidelines from the AC Handbook, we have not necessarily quoted or cited the preambles to them. There is no such statement in the Forest Plan and EIS

9. 29 With the exception of losses due to erosion, nutrient and organic-matter losses are likely to recover within a few years to a few decades from...management practices.

It is interesting to note that this respondent accused the AC Handbook of a "very broad, unsubstantiated generalization" in one comment, but that generalizations such as this are evidently quite acceptable. In some ways, this is like saying to our children that a balanced and nutritious diet is not so important today, because over their life they will certainly have enough nutrition available to them We challenge the respondent to produce the literature and research that support this contention

9 30 The Monitoring and Evaluation report monitored productivity - in all but one instance was there any effect on soil productivity? Why do you propose such draconian measures by requiring slash be left in the forest?

We do not consider leaving slash in the forest as a draconian (harsh or severe) measure It is mitigation for management practices that would protect soil productivity, no different than other soil mitigation measures

9.31 The Forest should analyze the cost effectiveness of Whole Tree Harvesting, including BD deposits, purchaser slash disposal, site preparation costs, timber sale revenues, and soil productivity.

We have analyzed the various economic aspects of silvicultural systems, and have used those figures in the FORPLAN analysis We have not analyzed the various logging systems,

and do not see the value in doing so at the Forest Plan level, because many of the costs you identify are adequately addressed in the timber sale appraisal

9.32 Soil damage may not exceed 15 percent of an activity area. Without a definition of "activity area," this statement is subjective and meaningless

"Activity area" is not defined because there are a number of them that could be analyzed A timber harvest unit, a grazing pasture or allotment, a watershed, a landscape, a recreation area, or a burned area could all be activity areas They could range in size from a few acres to thousands of acres We believe the current reference is appropriate as written

9.33 The DEIS refers to keeping bare soil at less than 20 percent, yet that may impede regeneration.

We do not believe that soil productivity should be risked or sacrificed in order to achieve proper stocking levels In fact, to risk serious erosion would certainly impede regeneration, by removing nutrients and valuable topsoil, so important for seedling growth and survival We believe we can achieve soil protection and obtain adequate regeneration within the proposed bare-soil estimates

9.34 Past prescribed fires have severely burned soils. What factors led to this and what mitigation is proposed? How would this be different than wildfire effects?

The Eagle Mountain prescribed fires occurred in the piñon landtype association Piñon trees were cut, lopped, and burned in hot slash piles, scorching the soil or killing the soil biota These sites have been slow to revegetate

We have used "adaptive management"to try things differently and learn from the past Our latest approach is to kill trees with herbicide and then burn them on the stump, where the heat is well above the soil surface This has been fairly successful, though we are continuing to monitor results

Finally, wildfire damage of soils typically affects less than 10 percent of the total burned area severely This damage is well within allowable limits, and is not comparable to the Eagle Mountain project

9.35 What is "do not exceed allowable limits?"

The Soils section on environmental effects, Resource Protection Measures, states that soil damage may not exceed 15 percent of an activity area Those are the defined limits and are clearly described in the text

9.36 While a twofold increase in nutrient removal is plausible, stating that 3--5X increases are typical strongly suggests a transcription error or major misinterpretation of the original reference.

The Draft Forest Plan and EIS made no such statement However, we have asked Dr Dan Binkley, author of Forest Nutrition Management, to critique the nutrient portion, and his response indicates that 2--5X may be a better estimate, and in general supports those numbers It is not a misinterpretation

9.37 Documented productivity losses from Whole Tree Harvesting(WTH) remain rare, and most assessments of such losses are based on model projections that have yet to be validated.

While there is always the need for more research, we feel the amount developed to date, whether projected by model or based on actual on-the-ground measurement, shows a clear and obvious trend WTH may impair long-term productivity

On the other hand, what evidence is there that shows that WTH will not cause possible reductions in long-term productivity? Our literature review and those done by others (Woodard, 1993) show very few reports reach that conclusion

9 38 Are there methods to quantify the amounts of branches and leaves needed to ensure adequate nutrients? Dr Adams of Oregon State University responded **that there is no *widely accepted procedure for doing this***

We agree that there is no widely accepted method to quantify the amount of branches needed for retention. That is why we propose to err on the conservative side and keep all branches and limbs on-site

9.39 What logging systems have proven most feasible for leaving tops and limbs on the site?

Dr Adams suggested cut-to-length systems We concur, and have seen these operations in the West They have many advantages for soil protection that produce desirable conditions

Conventional tractor logging, cable systems, and cut-to-length all leave tops and limbs in the woods WTH systems can accomplish the same effect by grapple-skidding the fine slash into the forested stand on the return trip for another load We should raise this awareness and will add additional discussion of this into the EIS

9.40 The breakage of limbs during WTH in winter would assure that "a significant amount" of tops and limbs would remain in the woods. This should be documented.

We concur, and invite partnership investment in this possibility

9.41 It is not clear where the Forest has identified the technology to meet NFMA requirement and Judge Finesilver's ruling.

This concern ties with the second of five criteria in determining the amount and location *of tentatively suitable timber lands (TSTL) This criteria removes lands from timber* production if there will be irreversible resource damage to soil productivity or watershed conditions, as required by CFR 219 14(a)(2)

Soils may be damaged by erosion, nutrient removal, compaction, and mass movement Of these, erosion, nutrient removal, and compaction may by mitigated on site, but landslide-prone areas are difficult to mitigate

Harvesting in riparian areas and wet soils can be mitigated by winter logging, logging on snow or frozen soils, horse logging, or by means which transport the logs suspended above the ground (balloon, helicopter, or full-suspension cable systems) Also, it should be noted that riparian areas are not included in the suitable timber land base

Soil map units include a rating for mass movement potential, with ratings from very low to high Tree removal on soils with high potential for mass movement could change soil water balances, resulting in mass movement In general, soils with high mass movement were determined unsuitable for timber harvest under existing technologies These soil map units were excluded from the TSTL base, thereby protecting those soils and watershed conditions from harvest activities

The Forest's specialists, in reviewing the types of timber harvesting technologies available for use on the RGNF, have developed standards and guidelines that specifically protect soils and watershed conditions on TSTL's Additionally, the Forest has performed a Watershed Assessment that has identified the level and type of disturbance, coupled with potential erosion hazard, and ranked watersheds relative to past and present disturbance Watersheds, containing suitable timber lands and reflecting high levels of disturbance, were constrained from harvesting for few to many decades to allow those lands to recover from past harvest activities, or until field surveys document that streams have not been impacted

9.42 The Soils Standards and Guidelines (in the Plan) do not address compaction and productivity.

The Plan's Soils Standard #6 in the DEIS most certainly describes limits on compaction The text of the EIS describes the effects of compaction, and why we propose such limits

9.43 New Standards are needed for Hydric soils.

This statement offers criticism, but no constructive solution We believe the current Standards are protective of all soils, including those with high water tables

9.44 Soil Standard #2 states that limitations on soil disturbances should be based on soil conditions and not the purpose of the specific operation

The Plan presents broad planning direction At the project level, soils limitations are reviewed as part of the project analysis The main point of that Standard is to minimize the extent of soil impacts by designing for the minimum amounts of roads, skid trails, etc necessary to accomplish the project, which we feel is a prudent standard As part of designing the project, we would include soil limitations so that the specific qualities of the soils are built into the project plans or alternatives

9.45 The Monitoring and Evaluation Report should contain descriptions of the specific projects with regard to soils, erosion, and regeneration.

We concur with this and plan to do Annual Reports, as required by the regulations

9.46 Monitoring and Evaluation should be done on a project-by-project basis

The Forest monitors soils effects and mitigation through a variety of actions Some may be as simple as a conversation with a project leader, while other monitoring may require a very detailed and costly soil-sampling analysis

The Monitoring and Evaluation portion of the regulations (36CFR 219.12 (k)) states that monitoring and evaluation should be done at intervals established by the Forest Plan "on a sample basis " The regulations clearly acknowledge that the Forest reviews only a portion of the projects done annually, in making the determinations stated in the regulations

9.50 There are no estimates available that show the amount of prescribed burns, so it is difficult to quantify soils effects However, the DEIS (on page 3-199) contains estimates for ponderosa pine

The EIS will make that factual correction

10. Minerals

10.1 No minerals activity should be allowed in Wilderness Areas.

By law, all designated Wildernesses are closed to mineral extraction Wilderness Areas (and recommended Wilderness Areas) are therefore legally unavailable for leasing Designated Wilderness is withdrawn from locatable-mineral entry

10 2 Minerals activity should be not be allowed on NFS Lands because minerals are a nonrenewable resource.

Minerals development and production is an allowable "multiple use" of National Forest System lands, as amply described in the "Legal Framework" section of the EIS The 1872 Mining Act will be the governing law until changes are enacted by Congress The existing laws also contain resource-protection requirements

10.3 The oil and gas stipulations are generally good The Forest should mitigate minerals disturbances. Respondents don't want another Summitville.

While site disturbances are probable for minerals developments, the laws and regulations provide ample opportunity for resource protection, stipulations, and mitigation For example, bonding is allowed and would be used to assure that reclamation work is accomplished

The oil and gas leasing stipulations, and other mitigation measures, were developed by an interdisciplinary team of specialists so that resource effects would be minimized and mitigated These have been thoroughly discussed in the Minerals and other sections of the EIS and Plan

10.4 There is no mention of cleanup and restoration of mined lands.

There is considerable discussion of mined-land restoration, or cleanup, in the Affected Environment, Locatable Minerals section of the EIS, as well as in the section discussing "Effects of Abandoned Mine Lands" The section on Water also discusses mined-land cleanup effects and efforts

10 6 The respondents believe very little land should be available for leasing. Roads in particular are of concern.

The leasing alternatives analyzed a wide array of options, from no leasing to leasing all legally available lands Overall, and considered in the context of other Forest actions, the effects of oil and gas leasing, development, and production, as described in the EIS, are very minimal

We estimate that less than 20 miles of roads would be necessary for oil and gas programs over the next 10 to 15 years Since many of the wells would be dry holes, those roads would be immediately obliterated, unless there are public benefits to keeping them open After 10 years, only 7 miles would need to remain open for well maintenance and production This is described in the EIS and we believe the road effects to be minimal

10.6a RNA's and SIA's should not be leased, as opposed to leasing them with NSO stipulation.

NSO was preferred because it is the least restrictive stipulation that still is protective of resources This is described in the lease stipulations, and in the EIS

10.7 The Plan closes off too much area to oil and gas

The selected Alternative G proposes no additions to Wilderness, but does propose to remove from leasing backcountry areas The reasoning is that if these unroaded areas are

off-limits to timber production, then we should be consistent and they should also be unavailable for oil and gas leasing The selected alternative allows oil and gas leasing in most of the high-potential areas for oil and gas resources

10.8 The Minerals section downplays the effects of the minerals program The effects seem low. Do the effects consider watershed and water quality?

The effects of the leasing alternatives are based on the "Reasonable and Foreseeable Development Scenario," developed by a petroleum geologist and other specialists. It estimates the potential amount of development that could occur on the Rio Grande National Forest over the planning horizon

Once that report was completed, the Forest used a number of assumptions to estimate effects (The estimates, for example, of the size of a well pad and the length of road needed are based on actual on-Forest wells that have been drilled in the past.)

We feel this is the best estimate of direct effects on soil and water resources, and of indirect and cumulative effects The analysis in no way downplays the effects of minerals developments, but attempts to give the best estimates based on our on-Forest experience with this activity

The effects on watershed and water quality have been considered in the analysis We would not allow occupancy in watersheds beyond disturbance limits This is described in the EIS, Minerals section and also in the Water section

10 9 No minerals activity should be allowed in the Sangre de Cristo Range.

A number of responses concerned oil and gas activity in the Sangre de Cristo mountains Our Oil and Gas Potential map shows that the Sangre de Cristo range has low potential in some areas and "No currently recognized potential" in others Steep slopes would necessitate no surface occupancy in many instances, if such areas were to be leased For these reasons, the decision was made not to allow leasing of the Sangre de Cristo portion of the Forest

10.10 Oil and gas issues are site-specific and cannot be addressed at the prescription level Wants stipulations on known heritage resources.

The Heritage Resources section of the EIS stipulates that inventories be completed prior to oil and gas drilling activities In addition, the Minerals section states that under standard lease terms, a proposed oil/gas well can be moved up to 200 meters in order to avoid specific site resources

While some stipulations are applied at the prescription level, if occupancy is allowed, then heritage resources, if found at a well location, could be protected by moving the well (Please also see Appendix G in the Forest Plan, which describes the Notice for Lands of the National Forest System under Jurisdiction of the Department of Agriculture This notice addresses site-specific cultural-resources requirements)

10.10a Does the "80 percent cover" of the Mineral and Energy Resource Standards and Guidelines mean 80 percent of the area reclaimed, or 80 percent of the potential plant cover?

A number of reviewers commented on the 80 percent Standard for successful reclamation This Standard was originally proposed in the Watershed Conservation Practices Handbook, but has since been removed because of the obvious difficulties in interpreting it We have rewritten the Standard to remove the 80 percent requirement

10.11 In all prescriptions, Stipulations must be Standards

Stipulations are intended as guidelines so that if waivers, exceptions, or modifications are necessary, those changes would be based on the project-level environmental analysis. Guidelines can be changed without amending the Forest Plan. The Forest prefers to have some degree of flexibility in the Stipulations, and therefore proposes them as Guidelines The Forest would consider waivers, exceptions, or modifications only in rare situations, and would not routinely issue these

10 12 The stipulations should be NSO for prescriptions 3 4, 4 4 and 4.3). Areas 3.4 and 4 4 should be withdrawn from (locatable) mineral entry.

Mineral development is an accepted use in Scenic and Recreation River corridors, as described in the EIS section on Wild and Scenic Rivers and as directed in FSH 1909 12, Chapter 8. A Dispersed Recreation area can also have mineral developments

The Controlled Surface Use stipulation for management prescription 4.3 ensures that no occupancy would occur near travel corridors The stipulation requires that any oil and gas drilling activity be screened from view If the proposed well is too close to a travel route and is highly visible, then under the CSU stipulation, the well site could be moved to a buffered or screened location with less visual impact Scenic and Recreational Rivers have the same stipulation, for the same reasons

10.13 What does Table IV-33 in the Forest Plan mean by oil and gas leasing "under standard lease terms plus stipulations"?

This means that for those management prescriptions, standard lease terms alone would suffice, unless there are steep slopes or areas of moderate to high mass movement, or other resource stipulations become necessary Under Prescription 5 11, on a 45 percent slope, standard lease terms plus the steep-slope stipulation (NSO) would apply

10.14 What is meant by "exceeding the RFD by 10 percent"? How will that be measured? There are inconsistencies in the monitoring plan regarding this issue.

The monitoring plan will be adjusted to make it consistent with the EIS If the effects of the oil and gas leasing program exceed the RFD by more than 10 percent, a Plan amendment, supplement, or revision may be necessary Effects would be measured by such parameters (contained in the EIS) as acres of soil impacts, miles of roads, and other effects considered cumulatively

10.15 Steep slopes should be NSO.

In the selected Alternative G, steep slopes would be protected with an No Surface Occupancy stipulation, as you suggest

10.16 The Forest Service should not make the "d" and "e" decisions at one time

The EIS explains why the Forest chose to make the "d" and "e" decisions in this Record of Decision Please refer to the Minerals section, Environmental Consequences, Leasable Minerals, Introduction

10.16a Oil and Gas affecting fragmentation is not addressed.

The effects of the roads and pads necessary to oil and gas development are minimal Cumulatively, the Forest plans to construct very few roads, as shown in the EIS, Travel Management section, for oil and gas development and timber harvest (These totals are shown in DEIS Table 3-91)

In the EIS, "Fragmentation and Connectivity" section, road density is included as one of six factors affecting the risk to corridors The analysis states, "Any type of road is considered,

timber, oil and gas, recreational " Based on the Environmental Consequences section for Fragmentation and Connectivity, it is evident that oil and gas roads were considered in the analysis, which concluded that " the impacts of road fragmentation will be minimal in all alternatives "

10.17 The timing limitation should not be waived for field development Wildlife need the protection more than ever at that time

The timing limitation would be waived if a discovery and field production were developed This is necessary for well maintenance and monitoring Another level of NEPA analysis would be done prior to field development, and wildlife mitigation measures would be included at this level to minimize the effects on big-game populations.

10 18 Waivers, exceptions and modifications to lease stipulations should only be grated in extraordinary situations, and only after a thorough review that includes public input.

We agree

10.19 The Forest needs to withdraw ecologically important areas.

"Mineral withdrawal" is a term generally used in reference to hard-rock, locatable minerals Leasable minerals are either unavailable by law or by management direction

All designated Wilderness Areas are withdrawn from locatable-mineral entry, subject to valid and existing rights Wilderness is also legally unavailable for leasable-mineral development

The selected Alternative G proposes not to allow leasing in vast acreages of unroaded areas Alternative G also has a very protective set of resource stipulations that would protect ecosystems as you suggest

Alternative G does not propose to withdraw vast acreages from locatable-mineral entry, however, for a number of reasons Over much of the Forest, chances of locatable-mineral discoveries are low Another factor has to do with the cost and process for implementing large acreages of withdrawals These large areas must be analyzed and receive Congressional approval The Forest budgets do not allow for such costs, and therefore we decided to eliminate large-area withdrawals (Please see the sections in the EIS that discuss Alternative G and withdrawals)

10. 20 Concerns were expressed about the no-lease proposal and excessive use of NSO stipulations. Respondents suggested that controlled surface use would suffice for many of the resource concerns.

We selected alternative proposals to add more no-lease options to lands such as Backcountry We also decided to keep most of the resource stipulations the same, since there was, in general, a favorable response to those proposed in the DEIS

(The rationale as to why an NSO stipulation was used is described in "Description and Effects of Stipulations" in the EIS, as well as in the Stipulations appendix in the Forest Plan)

10.21 The effects of an oil and gas program are minuscule.

Under the selected alternative, a large portion of the areas mapped with "High" oil and gas potential would be available and authorized for oil and gas leasing Areas with low or no currently recognized potential would generally be unavailable in Wilderness, or discretionarily removed from leasing by management direction

We believe that for the next 10 years, the decision does consider the relative insignificance of the oil and gas leasing effects, and allows for considerable acreages for lease in the high-potential zone

10.22 The Forest has used "number of wells" as the primary focus in describing effects, but does not describe the various consequences of those wells.

Our focus is not merely on number of wells, though we do consider this in calculating effects and assumptions

We believe we have appropriately described "net effects" as you suggest The table titled "Summary of Projected Drilling Activity on the RGNF" in the Minerals section of the EIS discusses and summarizes not only well numbers, but miles of roads, acres disturbed by roads, pad-size acres, and total acres of ecosystems affected

We have also discussed the effects of dry holes and the resulting closure of roads and reclamation of pads ("Effects of Leasing from Roads and Pads", EIS), which reduces or lessens effects

It is important to describe effects in total, as well as in part That is why effects summaries show total effects over the 10-year period (The Soil and Water sections also discuss effects of the RFD in total, in addition, refer to 10 14)

10.23 Withdrawing the Wild and Scenic Rivers is more restrictive than law requires.

Eligible Wild Rivers need to protected in a manner that maintains the option for formal designation This is described in FSH 1909.12 (8 14), which states that". the plan must provide protection of the (eligible) river area until a decision is made as to the future use of the rivers and their adjacent lands " This is sufficiently described in the EIS, Wild and Scenic Rivers section

Our leasing alternatives looked at a number of ways to manage Wild Rivers, and selected no-lease options, because we chose to avoid adding any encumbrances to the area, while protecting the river's qualities

10.24 The range of (leasing) alternatives is inadequate. Add an alternative that is less restrictive to industry.

We disagree, we believe we've analyzed a wide array of leasing alternatives Alternatives range from "lease all lands with the least amount of restrictions" to "close all lands to leasing " In between these are a number of alternatives that lease most, some, and few of the legally available lands We could not legally do a less restrictive alternative than that proposed in Lease Option B1, which would lease all legally available lands with standard lease terms only

10.25 The Conditions of Approval need to be consistent with stipulations. The respondent claims that the use of the timing-limitation stipulation is too broad and goes beyond what is essential to prevent "unnecessary and undue degradation."

Conditions of Approval (COA) are not considered a formal part of the Forest Plan The standards and guidelines, management prescriptions, stipulations, mitigation measures and monitoring plans are the sections of the Forest Plan that regulate oil and gas operations on Forest lands

The Conditions of Approval are considered implementing technical measures and practices that would be developed at the APD stage We have taken steps to clarify that point in the definition of COA's

We are not clear on what the issue is relative to timing limitations We use the timing limitation to protect big game on winter range, and believe it is the least restrictive measure we could take and still protect the big-game herd (This rationale is discussed in two places in the Plan Appendix showing stipulations and in the EIS, Description and Effects of Stipulations)

10 26 The respondent has concerns that very little was discussed of the verification process

The verification process, required by the regulations, is defined in the "Lease Terms and Concepts Related to Oil and Gas" section The Regional approach to this process is to respond to the questions raised specifically by the regulations, such as, are potential environmental effects adequately described in the EIS, and can operations be allowed somewhere on the lease? This will involve a site-specific review of the lease tract, and the answers to those requirements would be developed at the more detailed site-specific stage

We believe this is an important part of the lease process, and will elaborate on this in the Final EIS

10.27 No minerals activity should be allowed in alpine areas

Oil and gas activities would not be allowed in alpine areas, because of an NSO (No Surface Occupancy) stipulation Hard-rock mineral development could occur, however, in alpine areas (outside Wilderness) under the 1872 Mining Act, in the various alternatives

The selected alternative proposes to back away from large mineral withdrawals, since such proposals are costly and subject to Congressional approval for areas greater than 5,000 acres Neither our actual budget nor the projected Plan budget would allow for such an undertaking at the Forest level We can impose bonding, mitigation, and reclamation requirements under CFR 228 hard-rock mining regulations

10 28 The Forest needs to study the effects of minerals on plants.

The section of the EIS on sensitive plants, special-concern plants, and significant plant communities, "Effects on Plants from Mineral Exploration and Extraction," describes the effects of minerals on plants

10.29 Mineral activities adversely affect water

The section of the EIS, "Effects on Water Resources from Mining," describes those effects

10 30 If mineral rights could be purchased, consider making Chama Basin a Wilderness.

We agree, but until mineral rights are acquired, we propose to manage this area primarily for the Backcountry prescription (Please see Appendix B and "Lease Terms and Concepts Related to Oil and Gas" and "Land and Mineral Ownership," in the Minerals section of the EIS

11. Research Natural Areas

11 1 I am opposed to RNAs.

The Code of Federal Regulations 219 25 directs the Forest Service to provide for RNAs during Forest planning (DEIS page 3-278)

11.2 I am opposed to the Finger Mesa and Little Squaw Creek proposed RNAs. Closure of these areas will push more people into Lost Trail Creek and Ute Creek.

The proposed RNAs will not result in those areas being closed to public use (DEIS page 3-282) We have decided to drop the RNA proposal for Little Squaw Creek The proposed Finger Mesa RNA would not affect these trails

11.2a With budget and personnel cutbacks, RNAs will be difficult to manage. Also, it would be better to phase-in RNAs over time instead of proposing the whole package at once.

Reduced Forest Service budgets mean less expenditure for all programs across the Forest We will always prioritize our workload to meet congressional intent while minimally impacting people, services, and resources

We believe our RNA proposal complies with Code of Federal Regulations 219 25 (see DEIS page 3-278) Therefore, we feel it is appropriate to implement the entire RNA package for the selected Alternative.

11.3 Explain selection criteria for RNAs.

The selection criteria for the proposed RNAs are discussed in the DEIS on page 3-279

11.4 Designating special areas invites heavier visitor traffic.

DEIS page 3-282 explains the limits of recreation use in RNAs RNAs will not be advertised to the public

11.5 There are several typographical errors in the RNA section

We will correct them

11.6 I am opposed to the Little Squaw Creek proposed RNA

We have decided to drop Little Squaw Creek proposed RNA

11.7 RNA designation is useless layering of one restrictive designation on another. *Wilderness protection is sufficient.*

An RNA designation is actually slightly more restrictive than a Wilderness designation (see draft Plan pages IV-18 to 19), and different in purpose Therefore, an RNA designation does have significant meaning

11.8 RNAs must be expanded on the Forest and they need to represent every ecosystem type on the Forest.

We believe the number of proposed RNAs is reasonable (See pages 3-279 to 281 of the DEIS for a description of our selection and size criteria) The proposed RNAs contain representation of the ecosystem types and Ecological Sections listed on DEIS page 3-279 Appendix D provides some detail of the plant communities represented in each proposed RNA Additional RNAs may be proposed in the future on a case-by-case basis

11.9 I did not find an implementation plan for any baseline monitoring of climate and vegetation.

The Draft Plan, page V-10 contains a tactical monitoring schedule for RNAs Specific monitoring protocol will eventually be developed in cooperation with the Rocky Mountain Forest and Range Experiment Station

11 10 Do not use RNAs as a substitute for expanded Wilderness

The intent of establishing RNAs was to comply with Code of Federal Regulations 219 25 (DEIS page 3-278)

11.11 The Draft Plan does not adequately consider recreational impacts on RNAs (DEIS 3-282). The Draft Plan must fully and substantively consider these impacts, and it needs to clarify what the assessment is and how it is to be mitigated.

The discussion is found in the DEIS, page 3-282, we are not sure what you think is inadequate

11.12 The proposal to recommend seven RNAs consisting of 42,782 acres in perpetuity, with extremely restrictive uses, should be further developed and justified. At this late date, where did the sudden need for expansive acreage come from?

The legal framework and Forest Service direction from the Chief and Regional Forester are detailed in the DEIS, page 3-278

11.13 The purpose of RNAs is very specific to research. Also, RNAs should be unique in character. Where are the descriptions for each of these areas and how were the boundaries drawn?

The purpose of RNAs is described in detail in DEIS pages 3-278 to 281 The descriptions of each proposed RNA may be found in Appendix D of the DEIS A description of the boundary-drawing process is described on page 3-281 of the DEIS

11.14 The rules for RNAs should be completely disclosed to the public at the beginning of the public involvement process.

There were two public notifications of the Forest's interest in designating RNAs, first in 1992 and then in December 1994 RNAs were proposed in the DEIS in 1995 The DEIS is the appropriate place to fully describe the environmental consequences of proposed RNAs on the RGNF

11.15 The actual costs of administrative management for the RNAs should be included in each of the Draft Plan revision Alternatives.

The only additional costs of RNA management would be the small amount of administrative time for the Forest Ecologist (see draft Plan, page V-10) for monitoring twice per decade. There would also be some fencing costs for the Hot Creek and Spring Branch proposed RNAs (DEIS page 3-282)

11.16 The proposed mix of RNAs should vary by Alternative.

Our RNA proposal was based on the need to establish a network on the Forest of representative ecosystems Because of this, we decided that if an area qualified, it should be proposed through all Alternatives except NA However, based on public comments, we are revising our proposal for the Final EIS

11.17 There should be coordination with other adjacent Federal units to see that there is not a duplication of research areas or another area that may be more well suited to the purpose of study and education.

We have coordinated closely with our neighboring Forests A regional plan (entitled "Research Natural Area Guide for the Rocky Mountain Region, USDA Forest Service," 10/93) which was developed for a RNA network across the entire Rocky Mountain Region

helped guide our selection process No duplication is anticipated with protected areas managed by other land management agencies

11.18 The role of the Research Natural Areas Committee for Region Two in the selection and recommendation of RNAs is not clear.

The RNA Committee reviewed and concurred with Forest recommendations for proposed RNAs Each National Forest may recommend RNAs, but the Regional Forester has the actual authority to designate them

11.19 The Forest Plan Goals section, Appendix A of the Analysis of the Management Situation, does not include a goal for establishment of RNAs. Is it a goal? As stated, the goals will be decision criteria by which each Alternative is judged.

The Analysis of the Management Situation (AMS) did mention the need for identifying RNA's: "The Forest Plan Revision will include careful consideration of possible RNAs " (AMS page IV-9) The AMS further states, "The Forest will be looking at other potential RNAs during the summer of 1994." (AMS page III-39) The establishment of RNAs is a Forestwide Desired Condition (see Draft Plan page I-3)

11.20 Some of the RNAs are within Wilderness. Is this a conflict of the intent of the Wilderness and/or the RNA?

No, there is nothing wrong with a dual designation However, the RNA designation is slightly more restrictive than is Wilderness

11 21 RNAs require specific attention to protection from fire, insects, disease, and animal activity. These protections put extra burden on the Forest Service when the agency manpower and budget are in decline. We recommend a much more modest approach to the question of RNA designation and that they be primarily located in Wilderness Areas.

Putting all RNAs in Wilderness would not accomplish the intent of building a RNA network of representative ecosystems on the RGNF--especially those ecosystems found in lower elevations Fire, insects, disease, etc are natural processes from which, in general, RNAs will not need to be protected.

11.22 Our observations indicate that the Establishment Record would be involved and expensive to prepare. It seems more practical to select only RNA proposals that are very specific to the research intent and work towards their creation, rather than the *broad-brush approach suggested.*

We are using the Colorado Natural Areas Program, under a Challenge Cost-Share arrangement, to draft Establishment Records Thus, they will be relatively inexpensive for the Forest Service to produce

11.23 We will not support Alternatives that contain RNAs overlapping acres in the tentatively suitable timber base.

Only 1,244 acres overlap the tentatively suitable timber base (DEIS page 3-282) This represents only 0 2% of the total tentatively suitable timber acreage on the Forest It is also unlikely that some of these tentatively suitable acres would be desirable for logging, due to limited access, steep slopes, and low timber quality

11.24 RNAs would seem to be useful as landscape linkages. If the Forest Service decides not to increase Wilderness areas, an increased number of RNAs seems important, even if they are on forest suitable for timber harvest.

Although they could serve as landscape linkages, our specific intent was to build a RNA network to represent ecosystems, as described in the DEIS on page 3-279 We believe the proposed number of RNAs is reasonable

11.25 I have concerns that some of the areas do not really have the components that are required, especially those within or adjacent to active grazing allotments

The proposed RNAs were selected based upon the best available information, and after field review during the summer of 1994 (See DEIS page 3-279 to 281 and DEIS Appendix D) We believe the proposed areas meet the qualifications of RNA eligibility

11.26 Do active or vacant grazing allotments really fit the RNA selection criteria of relatively undisturbed plant communities?

It would be very difficult, if not impossible, to select RNAs that had not been subjected to historic domestic-livestock grazing Based on our field work, we believe these areas meet the qualifications for RNA eligibility (see DEIS Appendix D)

11.27 I don't feel that 42,782 acres are really required to achieve the goals of RNAs.

We have decided to drop the Little Squaw Creek proposed RNA, which reduces the proposed RNA acreage by almost one half

11.28 The proposed RNAs are too small to reflect landscape-scale ecosystem processes. Therefore, they are of limited value to true ecosystem management For example, the largest area, Little Squaw Creek, is totally within already protected wilderness. Hot Creek, the smallest RNA, allows grazing If RNAs are to serve as a natural reference, grazing cannot occur. Spring Branch, another small area, is bisected by a non-RNA road, and, under two Alternatives, would allow ATV use. Grazing, hunting, and motorized game retrieval in RNAs are antithetical to research and natural areas. To prohibit mountain bikes and permit ATV use is illogical

We believe, based on the information presented in the Process portion of each Landtype Association description (DEIS page 3-41 to 74), that we have made the proposed RNAs large enough to incorporate landscape-scale processes

The selection, size, and allowable uses of RNAs were based on a sensitivity to existing uses in the proposed areas The grazing in the Hot Creek proposed RNA is incidental, and the permittees involved have agreed to avoid the area (DEIS page 3-282) The road through Spring Branch is very popular, so we tried to accommodate existing public use while maintaining the functional integrity of the proposed RNA The ATV game-retrieval issue in the Spring Branch proposed RNA is another example of compromise to allow an existing use under the travel management policy for Alternative B (see DEIS page 3-362, Table 3-93) It was also a practicality issue Under Alternatives B, it would have been very difficult to enforce an ATV ban in Spring Branch (DEIS pages 3-282 to 285) We incorrectly included Alternative E in this scenario, so we will make the correction in the Final EIS In contrast, mountain bikes are generally not used in the proposed RNAs and the intent of RNAs is to disallow mechanized uses Because the existing use was minimal, we kept the mountain bike ban in the RNA standards and guidelines

11.29 Under-represented Landtype Associations (LTAs) such as LTA5 (ponderosa pine), LTA10 (willows), LTA12 (low-elevation grasslands) merit serious consideration in the RNA or Wilderness programs.

The proposed RNAs do contain representation of the LTAs mentioned The DEIS lists the general vegetation zones represented by each proposed RNA (page 3-280) The DEIS

Appendix D (pages D-5 to 7) provides more detail on the plant communities represented by the proposed RNA system We feel the proposed RNAs are a very good start at building an RNA network of representative ecosystems on the Forest

Generally, some lower-elevation ecosystems are more extensively represented on lands managed by other Federal agencies (e g., the National Park Service and Bureau of Land Management) Hence, these agencies may need to assess their opportunities for recommending portions of selected lower-elevation ecosystems to Wilderness designation

11.30 **The proposed monitoring strategy states that on-site visual inspections and/or transects should be conducted, but fails to describe what will be inspected or assessed in transects. Thus, there is no way of determining if this strategy is sufficient to determine whether human-induced changes are occurring to RNAs. Given the purpose of RNAs is to maintain a baseline of the natural (i.e., unimpacted) condition of a particular ecosystem, this is appalling.**

The intent of this monitoring is to get a quick sense of whether the RNA is being impacted by extensive physical or biological disturbances Depending on the nature of the disturbance, more detailed monitoring may be initiated as appropriate Given the location of each proposed RNA and the existing uses impacting them, the likelihood of significant change over the next ten-year period is extremely low This is why this monitoring item is infrequent and low-intensity sampling

11.31 **Do not drop any RNAs from the Final Plan. I would support expansion of these RNAs to include other areas. I would like to recommend that the Forest Service consider adding buffer zones around the RNAs to reduce the impact of surrounding uses on the character of each RNA (See page DEIS 3-281).**

We have decided to drop Little Squaw Creek proposed RNA We are not proposing more RNAs at this time The size of each proposed RNA was based on a consideration of minimizing outside influences (DEIS page 3-281)

11.32 **One area I feel would make an excellent RNA is at the top of Saddle Creek, southeast of Tobacco Lake, near timberline. This area is a beautiful riparian area, relatively untouched by grazing, with a high diversity of plants and shrubs.**

We do not plan to propose any additional RNAs at this time We will, however, take a closer look at this area and see if it merits RNA designation in the future

11.33 **The chart on Draft Plan page IV-16 for RNAs and grazing seems to conflict with Draft Plan page IV-19 under standard 9.**

We agree We will change the term "limited" on Draft Plan page IV-16 to "by exception" for the Final Plan

11.34 **The proposed RNAs may contain examples of Significant Plant Communities. These communities should be identified in each proposed RNA and discussed in environmental consequences.**

We did discuss how the documented occurrences of Significant Plant Communities were allocated, by Alternative, into Management Emphasis Categories (DEIS page 3-91) We think that was sufficient However, we will elaborate in the Final EIS on the plant associations, including Significant Plant Communities, that are found within each proposed RNA

11.35 Since RNAs are supposed to be "natural", why not reintroduce natural predator populations to these areas instead of using hunting to replace natural regulation (DEIS Appendix D, page D-3)?

We mentioned that hunting could serve to regulate some species (e g deer and elk) due to extirpated predators Often, the predator that is missing is an Endangered or Threatened wildlife species (e g , wolves and grizzly bears) Reintroduction of these species is the responsibility of the U S Fish and Wildlife Service and beyond the decision authority in a Forest Plan Revision

12. Wilderness

12.1 Recommend some/all unroaded areas as wilderness

36 CFR 219 requires the evaluation of roadless areas during the Forest plan revision process Different alternatives were analyzed which reflected recommending all (Alt A) or some (Alt E&F) unroaded areas for inclusion into the National Wilderness Preservation System The purpose of evaluating the various alternatives is to determine the mix of management prescription allocations which best meets the public desires, needs and opportunities to use and experience the National Forest Managing these areas as backcountry provides the Forest the flexibility to provide both primitive and semi-primitive (motorized/non motorized) recreation opportunities while maintaining their character and resource values

12.2 Set aside forest as wilderness.

The Organic Administration Act of 1897 specified the purposes for which National Forests were established and provided for their protection and management to meet public interest and use Legally we cannot set aside the entire forest as wilderness

12.3 Areas not currently wilderness - study for wilderness. Identify appropriate/ suitable lands for wilderness.

The DEIS addressed this concern on p 3-296/297 (roadless area assessment), Tables 3-70, 71,72 and in the Affected Environment Section p 3-297-300

12 4 Why is Forest not recommending wilderness?

The Forest currently manages 23% of its land base as wilderness, which meets current and future demands for providing wilderness experiences There are 13 wilderness areas within 100 mile radius of the Rio Grande, 9 National Parks or Monuments and 13 BLM recommended Wilderness Study Areas

There is a greater demand for primitive and semi-primitive (motorized/non motorized) opportunities outside of wilderness which the Forest can supply and manage to meet backcountry needs while maintaining the existing unroaded character and resource values

12 5 Preserve/protect wilderness and expand existing wilderness

Designated wilderness areas on the Forest are managed for various settings, management objectives, desired conditions (Management Px 1 11 pristine, Management Px 1 12 Primitive and Management Px 1 13 Semi-Primitive) and standards which preserve and protect these areas Implementation Schedules have been written and are being implemented to monitor all resources within the wilderness to determine if long term changes or resource impacts are occurring and implementing appropriate mitigation measures to protect the wilderness resource values

12.6 Purchase land to add to wilderness

The Forest has established a land ownership adjustment plan which identifies parcels of lands we would be interested in acquiring and National Forest lands identified for disposal Private inholdings within wilderness areas are high priority for acquisition Under the Land and Water Conservation Act, funds for lands assessed and approved for acquisition must be allocated and approved by Congress

12 7 We don't think there is a need to expand wilderness.

We agree While we looked into possible wilderness areas in some of the EIS alternatives, the Selected Alternative does not recommend additional unroaded areas for inclusion into the NWPS.

12 8 We think more wilderness should be proposed, especially on Forests on/near the Front Range.

This is beyond the scope of our forest plan Criteria and recommended lands for potential inclusion into the National Preservation System will be addressed in the Arapaho/Roosevelt and Pike and San Isabel plan revisions

12.9 Designation effect (related to recreational use) is a myth. DEIS does not explain why wilderness is not being proposed and why research is wrong.

You are correct in stating we did not explain why wilderness is not being proposed and we will correct this in the Final The designation effect was not an assumption or criteria for not recommending wilderness The Forest currently manages 23% of its land base as wilderness, which meets current and future demands for providing wilderness opportunities Within a 100 mile radius of the Forest there are 13 other wilderness areas, 9 National Parks or Monuments and 13 BLM recommended Wilderness Study Areas which provide a wide range of wilderness areas, opportunities and terrain

There is a greater demand for primitive and semi-primitive (motorized/non motorized) opportunities outside wilderness which the Forest can supply and manage as backcountry while maintaining the unroaded character and existing values

12.10 Chart on p. IV-2 shows motorized use in recommended wilderness

You are correct. It should reflect no motorized use

12.11 Platoro/Conejos River - leave as is Do not designate as wilderness.

This area you referenced will not be managed as wilderness The Platoro townsite is private land and outside the management jurisdiction of the forest management plan The Conejos River will be managed as an eligible recreation river 2 miles below the Platoro townsite to the confluence with the South Fork of the Conejos

12.12 Cochetopa Hills - should be Forest reserve.

Under the various alternatives, the Cochetopa Hills area was assessed for possible management Given past management objectives and decisions associated with this area, the preferred alternative indicates the mix of management prescriptions and objectives established for this area

12.13 Forest is not proposing two key corridors (Pole Mountain/Cochetopa Hills) for wilderness which link existing wilderness.

These areas were evaluated for their wilderness attributes, manageability and suitability as outlined in Appendix B and considered for potential wilderness under various alternatives These areas will be managed to meet backcountry objectives, desired conditions and opportunities while maintaining their existing character and resource values

12.14 DEIS did not list or discuss Wilderness Implementation Schedules.

The DEIS did mention wilderness implementation schedules but did not put each schedule in the appendix nor discuss them in much detail The schedules are part of the planning record and discussed in the Final

12.15 Change wilderness party size standard from 25 to 15 or 12

This issue was assessed in conjunction with our existing forest plan The various issues assessed were quality of visitor experience, impacts of larger groups and effects of lower limits to commercial outfitter to maintain an economically viable business In conjunction with some research done in various wilderness areas and working with the Colorado Outfitter and Guide Association, the Region established the group size limit for wilderness at 25 people and/or recreational stock

In scoping this issue with the Weminuche wilderness group, outfitters and publics this past winter, in conjunction with the San Juan plan revision, the standard will be changed as follows Maximum group size - no more than 15 people per group with a maximum combination of people and stock not to exceed 25

12.16 Wilderness resources standard 1 (p. VI-19) should be a guideline.

This will be assessed and changed if necessary

12.17 Guideline 3, III-18 conflicts with Standard 9 on p. III-19.

Appropriate changes will be looked at and incorporated into the Final

12.18 Standard 7 p III-19 should be rewritten.

This will be assessed and changed if necessary

12.19 Grazing re-issuance on vacant allotments in Px 1 11 should apply to Px. 1.12 and Px. 1.13.

Because of the recent Diamond Bar decision, this standard will need to be changed in all the wilderness prescriptions

12.20 Forest should consider changes to existing wilderness management prescriptions.

These recommendations will be discussed and evaluated with each of the wilderness coordination teams and appropriate changes made to meet management objectives and desired conditions

12.21 Px. 1.13 - theme contradicts the desired condition statement (in reference to frequency of encounters).

This will be corrected in the Final

12.22 Px. 1.12 - Forest should control incompatible uses.

Your concern is noted and will be incorporated in the final if needed

12.23 DEIS does not adequately describe the wilderness characteristics.

Each wilderness area is described in the DEIS on pages 3-290,291 and 292

12.24 Why are South San Juan and Sangre's Class II areas?

Wilderness areas in existence as of August 7, 1977, and which exceeded 5,000 acres in size, were designated Class 1 areas All other National Forest System lands including wilderness areas are Class II areas In assessing and monitoring clean air standards under the Clean Air Act we apply the same standards to both Class 1 and Class II areas

12.25 *Objective 2.1, p. II-2, Forest is extending wilderness management to backcountry areas without direction from Congress*

This objective is to provide for biological diversity and the protection of the integrity of ecosystems by broadening the base of understanding about how ecosystems function and respond to human influences The backcountry prescription meets this objective Congress has given us the direction to assess diversity (36CFR 219 26) in the planning process under the National Forest System Land and Resource Management Planning Act

12 26 Objective 4.3 a&b - Little known about impacts to high country and successful reclamation of these impacts.

These objectives are in references to resource damage as a result of over use Management area prescription standards (condition classes) will be implemented and monitored and social capacity determination established to prevent over use in the wilderness Research has studied and recommended high elevation methods and plant species for reclaiming vegetative disturbed sites in the high country These research techniques are and will continue to be implemented to high elevation impact areas

12.27 P. I-4 - Historical value - should include grazing.

Wilderness areas are designated for a variety of purposes, one of which is historical or cultural significance Grazing is allowed in wilderness but is not a significant characteristic for designation

12.28 Strategic plan direction for wilderness is more specific than the tactical schedule and need to monitor Standards and Guidelines to determine reasonable and effective resource protection.

The monitoring plan is being revised to better reflects the items to be monitored in wilderness areas in addition to monitoring Forest-wide and management area prescription standards and guidelines

12.29 The notion that Alternative A better responds to biodiversity is questionable.

Preservation is one method of addressing biodiversity Alternative A puts the most acreage of the Forest into Wilderness consideration The use of preservation is not always the best way, but that is the purpose of alternatives - to explore and analyze options.

12.30 Promote biodiversity and wilderness over natural resource extraction and recreation.

The purpose of the Forest plan revision is to evaluate alternatives and the range of management area prescriptions, desired conditions and standards in order to select the mix which best meets local and national needs By virtue of all the laws and regulations the Forest Service must follow, promoting wilderness above all other uses is not an option

12.31 Need a cumulative effects analysis for protection of wilderness and ecosystem integrity.

Forest wide objectives, standards and guidelines, management area prescription objectives, desired conditions, standards and guidelines and the monitoring of these items help determine changes over time and if resources are adequately protected.

12.32 We don't want any grazing in wilderness.

Grazing of livestock is allowed in wilderness per the 1964 Wilderness Act, Section 4(d)(4)(2)

12.33 Minimize impacts of timber sales adjacent to or near wilderness.

Section 110 of the 1980 Wilderness Act states "designated wilderness is not intended to create protective perimeters of buffer zones around each wilderness area " Sights and sounds of human activities are impacts associated with management activities near wilderness These do not have a significant affect on the wilderness character or resource values

12.34 Wilderness areas should not be available for timber harvesting or oil and gas leasing.

Your are correct and we agree, in fact its the law Designated wilderness areas are not available for timber harvesting or oil and gas leasing

12.35 Entering 13 roadless areas - how can this be better protection than wilderness designation?

The DEIS outlined the various alternatives and mix of management prescriptions Under the selected alternative, the FEIS outlines the effect of allocating resource management prescriptions to various unroaded areas At the experienced budget level, no unroaded areas would be entered At the full budget level only two unroaded areas would be entered during this next planning period The issue of timber suitability in backcountry areas is being re- evaluated by the planning team and will be addressed in the Final

12.36 Commodity activities co-exist together. Biologically intact wilderness can co-exist with very few of them. SW Forest have to protect wilderness. Grazing competes with and displaces native fauna

Commodity activities are not legally allowed in designated wilderness, so wilderness areas are biologically intact If you are referring to unroaded areas outside of wilderness, most of these areas are to be managed as backcountry and there biological integrity will be maintained Both native fauna and livestock compete for available forage The DEIS dealt with suitable rangeland on the forest and indicated their is sufficient forage to accommodate both

12.37 Trail inventory should include wilderness trails miles together with motorized trails.

This was included in the DEIS, reference p 357 - Table 3-90.

12.38 Areas and trails near fourteeneers (Peaks over 14,000 ft) - inventory and monitor for human impacts and maintain trails.

There is an initiative currently underway between the Colorado Mountain Club and Forest Service to develop a plan associated with multiple trails, human impacts, restoration and monitoring Once this plan has been developed and approved it will be incorporated into each wilderness area implementation scheduled

12 39 Trails into wilderness need to be NM. Difficult to stop motorized travel at wilderness boundary.

The Forest is evaluating our trail network to determine which will be motorized and non motorized and will be identified and incorporated into the Final

12 40 *No motorized vehicles/snowmobiles in wilderness*

Motorized vehicles are prohibited (36CFR 261 16) in National Forest designated wilderness areas

12.41 Open wilderness areas to snowmobiles.

The Wilderness Act prohibits all mechanized equipment and vehicles in wilderness areas

12 42 Off-travel snowmobiles could venture into wilderness areas - no signs indicating wilderness boundary and boundaries should be patrolled.

Posting of wilderness boundaries is in place at all major wilderness entry points and marked along all road corridors between wilderness boundaries Very infrequently do we get snowmobiles entering wilderness Patrols do occur in the winter at various wilderness entry locations When incidents are report to us, we investigate and take appropriate law enforcement action

12.43 Forest should not allow military flights over wilderness or over noise sensitive areas.

It is the policy of the Forest Service to discourage flights over wilderness areas below 2,000 feet above ground level (AGL), except for emergencies or certain special situations

Section 5 of the National Park Overflight Act of 1987 (P L. 100-91) requires the Chief of the Forest Service to "conduct an assessment to determine what, if any, adverse impacts to wilderness resources area associated with overflights" The study is to include acoustical survey of background sound, aircraft events and visitor impact surveys, potential safety impacts, injurious impacts to cultural resources and wildlife These studies will be conducted in coordination with the National Park Service, Department of Defense, FAA, NASA, National Oceanographic and Atmospheric Administration and the Environmental Protection Agency Potential overflight impacts are made to Congress by the Chief of the Forest Service

12.44 Provide for wilderness recreation activities

One of the purposes of wilderness is to provide for opportunities for solitude and primitive recreation experiences where success or failure is dependent on ability, knowledge and initiative Recreation opportunities are provided for in wilderness areas

12.45 Forest Service should not promote/advertise uses of National Forest, especially wilderness areas

The Forest Service promotes low impact techniques, wilderness skills, light on the land techniques (horse use) and the importance of wilderness for educational and awareness purposes Wilderness education and promotion of proper wilderness techniques is essential to the management of wilderness

12.46 Some groups wish to push professional outfitters out of wilderness areas.

Professional outfitters are considered a partner with the Forest Service to provide needed services, educate visitors and provide a variety of recreation services It is essential to

determine how much commercial use is needed on the Forest and the types of recreational and educational opportunities to provide which meet our management objectives

12.47 Appears Creede is being selectively discouraged as tourist focal point by limiting availability of recreation mix in the area.

This is not the case There are a variety of recreational management allocations and activities (scenic byway, wildlife areas which provide watchable wildlife opportunities, dispersed recreation corridors, developed campgrounds and sites, wilderness and backcountry areas) which enhance the community's recreational opportunities both in the summer and winter months

12.48 Alt E protects Pole Mountain as wilderness while focusing backcountry recreation and forest vegetation to the east.

Your opinion is noted The backcountry prescription provides both primitive and semi-primitive (motorized/non motorized) opportunities and maintains the unroaded character and resource values It is all a matter of choices and how best to meet manage the forest

12.49 If wilderness over use is a problem, recommend appropriate facility placement, limited trailhead parking, relocation of campgrounds and fee/permit system to limit capacity.

Over use of our wilderness is not a problem We have standards in place to monitor use and will be implementing a capacity determination for commercial, institutional and public use on the Forest

12.50 What are Forest's concerns about long term impacts to wilderness as consequence of increased recreation use pressure?

With four wilderness areas present on the Forest, the Sand Dunes National Monument, two wildlife refuges, two BLM Wilderness Study Areas and some 524,692 acres of backcountry available, there are sufficient opportunities for increased recreation use to be dispersed within the San Luis Valley Forestwide and management area prescription standards and guidelines will be implemented to mitigate resource impacts

12.51 DEIS fails to address potential long term impacts to wilderness as consequence to increased recreation use pressure

The DEIS did not address this concern and it will be addressed in the Final

12.52 Assumption made that wilderness is doing fine and no change expected over next decade - with emphasis on recreation, little discussion about ecological value of wilderness.

The DEIS outlined the ecological land types associated with each wilderness area on the forest and made reference on p 3-289 about wilderness areas providing habitat for TES species

12.53 Designating Wilderness as the only nonmotorized are in Alt D appears to be giving loopholes for oil and gas leasing and other enterprises

Wilderness areas are legally unavailable for oil and gas leasing and timber harvesting If this comment is in reference to the Forest's unroaded areas, a majority of these areas will either not be available for lease or leased under the no surface occupancy stipulations No loopholes exist for leasing these areas

These unroaded areas are available for hard rock mineral entry and could be developed should an economical mineral be discovered

12.54 Misleading to suggest backcountry prescriptions are equivalent to proposed wilderness.

Backcountry areas provide the same opportunities, challenges, setting and ecological landscapes and processes as wilderness The management of these areas is to provide the settings, management objectives and desired conditions as found in wilderness with the flexibility to provide some motorized opportunities and limited vegetative management to meet desired management objectives

12.55 With loss of roadless areas, provides us no place to go or provide wilderness education to clientele.

There is about 35% of the Forest in Roadless/Undeveloped areas Most of the alternatives do not alter the character of these areas The Selected Alternative will only enter 2 Roadless Areas out of 36 The character and resource values of the unroaded areas will not be lost or irreversibly changed when managed as backcountry These areas will provide the settings, opportunities and challenges for educating visitors about wilderness ethics, use and importance of these areas

12.56 The Sangre de Cristos are now wilderness - parking areas, trail improvements and signing have taken away from wild character since designation.

Management of this area as wilderness required some improvements be implemented in order to protect the resources within the wilderness and outside wilderness These improvements were made to decrease the amount of resource impacts and accommodate anticipated visitor use within the Sangre's

12.57 Willow Lake - too many fires and people cutting trees; trail work needed and eliminate fire rings.

There is a Forest order within the Sangre's to restrict camping within 100 feet of lakes This has been in effect for several years The displacement of fire rings around the lake will require some time and manpower The Saguache District has and will pursue volunteers to assist them in doing this type of wilderness project work Trails on the District are prioritized for maintenance work and put on a 3 year maintenance schedule

12.58 Use wilderness rangers to educate people in heavily used areas and patrol these areas.

The Saguache District does hire wilderness rangers and a few volunteers to help administer the Sangre's and La Garita Wilderness areas With budget reductions, rangers and volunteers are scheduled to patrol both wilderness areas but they can't be at heavily used areas on a consistent bases

12 59 Use fee boxes for funding and ask for volunteer donations.

This has been done at some of our developed sites but has not been expanded to our dispersed areas or wilderness. Your suggestion will be considered for use

12.60 Budget levels - DEIS states Alt A&F have least budget shortfall, then states Alt. A as being expensive

In the DEIS it states that if all the unroaded areas which are recommended for wilderness should become wilderness then there would be a budget shortfall because of the need to

post the boundaries of all these new areas and hire new personnel to manage and administer every wilderness on a consistent basis Given budget constraints, sufficient funds would not be available to do the required work associated with the administration of these new wilderness areas

12.61 Consider changing management prescription in unroaded areas from commodity emphasis to backcountry emphasis.

This concern will be evaluated by the planning team and appropriate changes made in the Final

12.62 Pristine Wilderness areas - This prescription allows grazing which increases occurrence of non-native plants and contravenes direction for noxious weed program

The spread of noxious weeds comes from various sources (wind, birds, wildlife, recreational stock and livestock) The reason for the noxious weed program is to keep noxious weeds at a level which will not overtake native plants

12.63 Public perception regarding livestock grazing in wilderness is patronizing.

Your opinion is noted Section 4(d)(4)(2) of the Wilderness Act outlines the intent of Congress to allow grazing in wilderness in a manner that utilizes the forage resource in accordance with established wilderness objectives Section 4(d)(4)(2) states "There shall be no curtailment of grazing in wilderness areas simply because an area has been designated wilderness nor should wilderness designation be used to slowly phase out grazing "

12.64 Recreation livestock is a management issue but livestock management is not? Why?

Allotment management plans need to address available forage for wildlife, livestock and recreation stock in wilderness areas Recreation stock use in wilderness areas tends to be localized where base camps are located This should be accounted for and managed in conjunction with livestock grazing

12.65 EPA wants all State and Federal lands made into wilderness, yet they do not pay a penny into keeping up the trails.

Congress, not EPA, designates wilderness on National Forest System lands and directs (36CFR 219 17) the Forest Service to assess roadless areas when Forests revise their Forest plans Congress also appropriates money to the Forest Service to maintain system trails on National Forest System lands

12.66 Propose protecting old growth forest as wilderness - adds valuable lower elevation forests to wilderness system.

The Forest currently manages 23% of its land base as wilderness which provides for old growth protection and will manage another 524,692 acres as backcountry which will protect additional old growth stands The Park Service has 7 wilderness areas totaling 612,193 acres and the Bureau of Land Management has 18 recommended WSA totaling 395,992 acres within the State which provides low elevation land type associations and associated old growth forest

12.67 Make wilderness management a high priority in the plan.

Both the management of wilderness areas on the Forest and funding to administer these areas is a priority on the Forest

12.68 Are some additions to South San Juan, La Garita and Weminuche needed for wildlife habitat enhancement?

Wildlife habitat was addressed in the species viability section (pages 3-119 to 3-132) of the DEIS The Forest has sufficient habitat that additions to the wilderness are not needed for habitat enhancement

13. Unroaded Areas

13.1 Protect/Preserve Roadless Areas

Roadless areas were assessed under the various alternatives in the plan. The Forest wide standards and guidelines, management area objectives, desired conditions and standards allocated to the unroaded areas are designed to protect these areas The majority of these areas will be managed as backcountry, which will protect their existing character and resource values.

13.2 The under-represented LTA's should be recommended for inclusion into National Wilderness Preservation System.

The Forest does have some unroaded areas which contain portions of the under-represented LTA's mentioned in the Regional needs assessment Because these forest/grass types are relatively small in comparison to the larger landscape and do not comprise the dominant composition of the unroaded areas, these LTA's will not significantly contribute to the Regional category The Park Service has 7 wilderness areas (parks or monuments) totaling 612,193 acres and the Bureau of Land Management has 18 recommended WSA totaling 395,792 within the State which contain low elevation LTA's which better represents the Regional LTA need

13.3 The Forest mentioned the under-represented LTA's but did not list (acres, location) these areas nor discuss.

These areas were mentioned but not listed They are as follows
Western Wheat grass
020933 (Bennett) 83 acres out of 34,265 total acres
0209DI (Middle Alder) 21 acres out of 5,384 total acres
Arizona fescue
020951 (Palmer Mesa/Wason) 5,257 acres* out of 20,652 total acres
020954 (Snowshoe) 4,602 acres* out of 30,459 total acres
020959 (Pole Mtn/Finger Mesa) 5,203 acres* out of 43,381 total acres
020975 (Bristol Head) 8,379 acres* out of 44,938 total acres
Pinyon
0209B8 (Ute Pass) 2,396 acres out of 9,008 total acres
6209C6 (Crestone) 2,661 acres out of 8,145 total acres
*These acres contain Arizona, Idaho and Thurber fescue species

The reason these areas were not discussed in detail is because they are relatively small areas within the larger landscape and did not make up the dominant composition of the LTA

13.4 What alternatives prescribed the roadless areas for protection, motorized use and *grazing?*

Protection of these roadless areas was considered under all the alternatives Alternative A & F allocated more of these areas for wilderness recommendation while Alternative E allocated some areas for wilderness recommendation and the remaining roadless areas for

backcountry motorized and nonmotorized recreation opportunities Alternative B & D recommend some roadless areas for timber production and the remaining areas for backcountry motorized and nonmotorized opportunities All roadless areas contain grazing allotments and are available for grazing

13.5 Chama Basin, Trout Mountain, Red Mountain, Palmer Mesa/Wason, Lake Fork, all areas adjacent to the South San Juan, Deep Creek, Table Mountain, Snowshoe Mountain, Middle Mountain, Pole Mountain, Kitty-Ruby-Buck Creeks and Summit Park are areas which need protecting and recommended for wilderness.

These areas were evaluated for their wilderness attributes, suitability and manageability as outlined in Appendix B and considered for potential wilderness under the various alternatives These areas will be managed to meet backcountry objectives, desired conditions and opportunities and managed to maintain their existing unroaded character and resource values

13. 6 Montezuma Park WSA should be included in the plan and recommended for wilderness

This area is located on the San Juan National Forest and was designated wilderness with the enactment of the 1993 Colorado Wilderness Act

13. 7 Roadless areas do not need to be recommended for wilderness provided they are administered as roadless.

Given the character, attributes, setting and opportunities of the unroaded areas, the management of these areas as backcountry will maintain their existing character and values

13.8 Table 3-73, page 3-300 - Is there potential for other resources?

The purpose of this table is to outlines by alternative how the unroaded areas would be managed Those roadless areas with prescription allocations 4 3, 4 4, 5 11, 5 13, 5 41, 5 42 and 6 1 would be managed for other resource values Backcountry areas will be re-evaluated for other resource management Px by the planning team and changes will be incorporated in the final

13. 9 Our (outdoor training programs) emphasis is on education and self-reliance which wilderness and unroaded areas provide

Education and self-reliance are important elements of the social and managerial attributes associated with the primitive and semi-primitive recreation settings These are essential elements in the management of both wilderness and unroaded areas The needs assessment and capacity determination will establish how much commercial use will be allowed within the wilderness and backcountry prescriptions

13.10 Chama Basin should be managed to protect its unique features and attributes. Should the mineral rights become available, Forest Service should purchase and recommend this area for wilderness.

The backcountry management prescription allocated to the Chama Basin area will allow the Forest to manage and protect the features and attributes within the Chama Basin area The Forest Service has contacted the owners of the Chama Basin mineral rights for the purpose of acquiring these rights The owners have informed us they are not interested in selling the mineral rights Should the owners change their minds, the Forest Service would pursue purchasing these rights

13.11 Plan did not adequately address the effects (recreation/wildlife) to these roadless areas.

In reviewing the environmental consequence section of the plan, your point is well taken and we will address these effects in the final

13.12 Close and revegetate all damaged areas.

This concern is addressed as a dispersed recreation standard (Item 3, p III-17) in the forest wide standards and guidelines and is addressed as a guideline for each of the wilderness management prescription (Px 1 11 pristine - p IV-4, Px 1 12 - primitive - p IV-5 and Px 1 13 - semi-primitive - p IV-6) in the management area prescription section

13.13 Alternative D open 33% of the roadless areas to motorized travel which fragments Forest and skews the balance of motorized - nonmotorized areas.

Allowing motorized use of trails in the backcountry is a legitimate use within the Forest The Recreation Opportunity Spectrum provides the framework for stratifying the recreation settings, activities and opportunities and helps define how the area will be managed The intent of the motorized backcountry prescription reflects those areas trails will be available for motorized use The intent is to provide for a mix of motorized and nonmotorized opportunities across the Forest, not to provide for one type opportunity The motorized vehicle use on trails does not fragment the forest

13.14 All unroaded areas should remain unroaded.

36CFR 219 requires the evaluation of roadless areas Forest plans outline management alternatives and assess how these areas can be managed within the next planning period Project activities which alter or change the character of these areas are assessed either in environmental assessments or environmental impact statements It is through the Forest planning and project analysis process that determines whether unroaded areas remain unroaded The intent of our current Forest planning process is to manage the vast majority of these areas as backcountry unroaded areas

13.15 Inventoried Rare II areas should be restored to 1979 conditions.

The purpose of the 1979 RARE II EIS was to determine which of these roadless areas was suited for inclusion into the wilderness system and which would be released for other resource activities The 1985 forest plan considered the RARE II EIS decisions, assessed these areas and allocated management Px on how these roadless areas would be managed.

Congress expanded or added several Wilderness Areas in Colorado in 1993 But with the three wilderness bills, there has been specific language which releases much of the RARE II areas for other uses

The RARE II inventory wasn't without errors There were roads in RARE II areas in 1979 and there are more roads The Forest has improved its unroaded area inventory and has new results These results and maps are part of the EIS and are also available for public review at the Forest Service office in Monte Vista

13.16 The Draft Forest Plan contains proposals and alternatives which threaten the future of wilderness and roadless areas

Without identifying specifically which alternatives and proposals threaten the welfare of wilderness and roadless areas, it is difficult to respond to this comment Forest-wide standards & guidelines, management area objectives and standards and guidelines are designed to protect the Forest resources

13 17 An assessment of any project activity which would effect the suitability of roadless areas is needed.

Yes, any project activity which would significantly alter or change the character of these areas requires an environmental analysis or environmental impact statement The level of analysis is dependent on the issues involved and significant effects to the roadless character

13.18 Plan shows 733,000 acres of roadless areas with 107,000 acres cut.

The figures mentioned reflect the RARE II areas, which areas were entered and the acres cut since 1980

An inventory of our unroaded areas was done in conjunction with the Forest plan revision process The criteria for determining the unroaded areas is outlined on p 3-296 of the DEIS and identified on p 3-298 & 299

13.19 The plan reflects road construction and timber harvesting occurring in unroaded areas. This is unacceptable. Unroaded areas assigned Px 5.11/Px 5.13 would likely have roads The 22 MMBF impacts roadless areas.

Your opinions are noted The preferred alternative and several other alternatives outline those unroaded areas which would be managed for timber production which would require road construction and timber harvesting

Site specific impacts and effects to these unroaded areas would be assessed when the proposed timber harvest and road construction are considered for implementation

13 20 Roadless areas should be taken out of the suitable land base. ASQ is too high because it includes roadless areas.

The purpose of the Forest plan revision is to assess the various alternatives which reflect how the Forest would be managed by allocating a mix of management prescriptions and activities in order to meet management objectives and desired conditions Under the various alternatives, those management prescription allocations allowing for timber production must be part of the suitable land base in order to reflect where timber management activities could occur as well as establish the timber outputs (ASQ) This reflects the intent and requirements of the planning regulations

This issue will be re-evaluated by the planning and ID team and addressed in the FEIS

13.21 Entering roadless areas is economically inefficient.

The economic feasibility of entering roadless areas by alternative and budget level was addressed in the DEIS on p 3-303 The FORPLAN model only picked up those unroaded areas which could be entered economically

13.22 Why would roadless area entry be more likely under Alternative D than B, when the later cuts more timber?

The DEIS does not reflect this statement In the environmental consequences section (p 3-30), it states entry into unroaded areas would occur in Alternatives B, D and NA In assessing the two Alternatives by budget levels, the DEIS indicates more roadless areas would be entered under Alternative B than in Alternative D

13.23 Map p 3-297 (roadless areas) overlap with map p 3-155 (Alternative D - suitable lands).

These are two separate maps The map on p 3-155 shows the location of the suitable timber lands on the forest under Alternative D and the map on p 3-297 shows the location of the unroaded areas on the forest

13.24 Prohibit/close or no snowmobiles in backcountry areas.

Allowing motorized use including snowmobiles within backcountry areas is a legitimate use on the National Forest Forest Service policy (FSM 2353 03) direction is to provide a diversity of trail opportunities for experiencing a variety of environments and modes of travel consistent with the National Recreation role and land capabilities The Recreation *Opportunity Spectrum provides the framework for stratifying the recreation settings,* activities and associated managerial requirements It is used as a tool to help assess recreational activities (both motorized and nonmotorized) which meet management objectives, desired conditions, and land capabilities both in the summer and winter seasons

A review of where snowmobiles use occurs on the forest was done and a very minor amount of use takes place in backcountry areas In addition, a review of the cited snowmobile literature which outlined their impacts was reviewed and much of the cited literature was not relevant to the forest or indicated different conditions than are found on the forest Based on this review, we feel restrictions on snowmobile use are not warranted in backcountry areas

13.25 Fund the monitoring of snowmobile activities.

The monitoring of off-road vehicle use and associated impacts are required in 36CFR 295 6 The monitoring of snowmobile use in backcountry areas is a monitoring item in the monitoring section of the plan (chapter 5) and will be a priority item to be funded in the FEIS

13.26 What will be the measure of perpetuating biodiversity in unroaded areas?

Our monitoring plan is being revised to include the monitoring of fine and course filter species and species habitat to determine if changes are occurring.

13.27 Allow for timber harvesting, O/G leasing and snowmobile use in unroaded areas.

The purpose of the Forest plan revision is to assess various alternatives which reflect how the Forest could be managed by allocating a mix of management prescriptions and activities in order to meet management objectives and desired conditions The preferred alternative (Alt D) and several other alternative (Alt NA, B, E) reflect the mix of management Prescriptions (4 3, 5 11, 5 13, 6 1) where these type activities are allowed and managed for within unroaded areas

13.28 Identify, map and protect unroaded areas

This was outlined (DEIS, p 3-296 criteria, p 3-297 - figure 3-61 map of roadless area and tables 3-70, 71 & 72 p 3-298 & 299) in the DEIS The management objectives, desired conditions, management area standards and guidelines which have been allocated to the roadless areas under each alternative are designed to protect the unroaded areas

13.29 Conduct a new roadless area inventory as part of the revisions process. The Forest has more roadless areas than has been identified

The DEIS outlines the criteria (p 3-296) and identifies the unroaded areas (tables 3-70, 71 & 72, p 3-298 & 299) on the forest based on this criteria

The Forest has identified all unroaded areas on the Forest This includes Roadless Areas (>5,000 acres), Undeveloped Areas (>500 and <5,000), and all other areas Together, these unroaded areas are about 34% of the Forest

13.30 Given the percent of land base in wilderness - question the need to close roads or have additional unroaded area Px.

Designated wilderness areas are established and managed to meet specific objectives as mandated by enacted Wilderness Acts Areas outside of wilderness are being assessed for purposes of meeting recreation and other resource demands and opportunities The purpose of the Forest plan revision is to assess how the Forest could be managed based on the various alternatives based upon the mix of management prescriptions and objectives There is a demand for a variety of recreation opportunities and activities on the forest for which the backcountry Px provides

Roads have been identified for closure in order to meet specific management and resource objectives The primary purposes for closing these identified travelways to motorized use are if resource damage is occurring, duplicate roads accessing the same area or two track roads which go a short distance and dead-end

13.31 The Forest has difficulty enforcing roadless area Prescriptions.

The issue is not enforcing the unroaded area prescriptions The issue is allowing motorized use (motorcycles) of trails within unroaded areas The inconsistency in the Pole Mountain area is the result of the 1983 Forest travel plan allowing motorized use on trails within this area and the 1985 Forest plan indicating the Pole Mountain area being managed as a non motorized area Thus the inconsistency Had the 1983 travel plan been incorporated into the Pole Mountain plan decision, travel corridors would have been shown with the remaining area managed for a primitive setting as outlined in the 1985 plan in the Silver Park - Wheeler - Wason Park area

The general character and conditions of the Pole Mountain area have not changed because of the motorized trail use and the primitive opportunities are available outside the motorized corridor

13.32 Reclaim motorized trails built in roadless areas

One of the Forest Service policy direction (FSM 2253 03) is to provide a diversity of trail opportunities for experiencing a variety of environments and modes of travel consistent with the National Recreation role and land capability

Trail opportunities can be motorized or non motorized Variety of environments can range from low elevation to high elevation and areas having both roads and trails or areas having only trails (backcountry areas)

Reclamation of motorized trails will occur should the use indicate extensive resource impacts or if the use is not consistent with the management area objectives or desired conditions

13.33 Need larger map of unroaded areas to reference information.

The map in the EIS is just give to the public an idea of amount and location All our maps are in a Geographic Information System (GIS), which can print these maps at any scale If you want to get any map at a different scale, please contact our office in Monte Vista

13.34 Table 3-5 appears erroneous. Data is biased since it appears only category of Forest Service ownership surveyed was roadless areas.

Table 3-5 shows the total recreation use (developed and dispersed) which occurred on National Forest lands within the Rocky Mountain Area Table 3-6 shows the amount of use which occurred in wilderness and roadless areas (dispersed use) on Federal lands in Colorado and New Mexico. Or worded another way, Table 3-5 shows the recreation use which occurs within the Provence (numerous forests) and Table 3-5 shows the recreation use which occurs at the Tri-section level (two forests)

13.35 **Table 3-5 shows 27 MM RVD's on NF in Colorado. Table 3-6 shows 26 MM RVD's in roadless areas. This is in sharp contrast to statement on p. III-331 which states "the most popular outdoor recreation activities in the Rocky Mountain Region are : (1) driving for pleasure....**

The intent of these two tables is to show the difference in recreation use at the Province and Tri-Section levels. As mentioned on p 3-26, the Province is a popular recreation area within the United States.

These use figures reflect the current uses on the Forest The statement you cited on p III-331 is a recreation trend which indicated within the next 10-15 years we should see a shift in backcountry use (hiking) to driving for pleasure as more people become older It does not reflect the province will see less RVD's, but a shift in the types of activities

13.36 **Table 3-13 on p 3-36 contrasts with Table 3-6 on p 3-27.**

The intent of these tables is to summarize the recreation use (RVD's) which occurs in the Province (Table 3-6) and the recreation use (RVD's) in the Tri-Section (Table 3-13) As stated on p. 3-36, the lands in the Tri-Section make up 31% on the land area in the Province and 21% of the recreation use within the Province

13.37 **Don't allow motorized use in backcountry areas.**

One of the Forest Service policy direction FSM 2353 03) is to provide a diversity of trail opportunities for experiencing a variety of environments and modes of travel consistent with the National Recreation role and land capability

Trail opportunities can be motorized or non motorized Allowing motorized use within backcountry areas is a legitimate use The Recreation Opportunity Spectrum provides the framework for stratifying the recreation settings, activities and opportunities and is used as a tool in determining recreation activities and opportunities which meet management objectives, desired conditions and capability of the area for motorized use.

Trails within backcountry areas will be re-evaluated and identified for motorized use and will be reflected (map and table) in the final

13.38 **Will the No Surface Occupancy protect unroaded areas from roads being constructed in them?**

These unroaded areas will either not be available for lease or be available for lease under the no surface occupancy stipulation. No roads will be constructed under the oil and gas stipulations However, these areas are available for hard rock mineral entry and roads could be constructed

14. Wild and Scenic Rivers

14.1 The current designations not clear nor is the issue of suitability studies

This is addressed in the DEIS on pages 305 & 306 - River Assessment which deals with the eligibility assessment and management prescription allocations for these rivers

14.2 Waste of money and time with W/S rivers.

The DEIS addresses why we undertook assessment on page 305 - Introduction Assessment is tied to W/S River Act and direction outlined in FSH 1909 12, Chapter 8

14 3 The Plan does not: (a) consider recreation impacts in the W/S river assessment, and (b) or in the management prescriptions (S/G).

(A) Good point - the recreation impacts were written for the rough draft but was not incorporated into the published draft This will be incorporated and addressed in the FEIS.

(B) Recreation standards and guidelines for W/S rivers are in the plan in Chapter 4 - Management prescriptions - pages IV-14, IV-26, IV-32 and in the DEIS, Chapter 3, pages 308-310

14.4 Several indicated support of the Forest's W/S river eligibility evaluation.

We appreciate your comments and support

14.5 Eligible rivers should not be managed without W/S river designation

The management of eligible rivers is addressed in the DEIS on pages 305 and 306 in the Introduction and River assessment sections

14.6 Effects of grazing was not addressed in the plan

This was addressed in the DEIS, page 31 - Effects from Range Mgmt

14.7 Timber impacts: (a) timber cutting should not be allowed in eligible wild river prescriptions, and (b) impacts from timber was not addressed in the environmental consequences section for scenic rivers.

(a) FSH 1909 12, Chapter 8 set forth the guidelines for standards for river classifications For wild rivers, trees can be cut for trail maintenance and fire protection purposes This is reflected in Chapter 3, page 308, Wild River, timber

(b) Good point - the effects will be addressed in the FEIS for scenic rivers

14.8 Reference is made to the 1979 Conejos River EIS specifically to private land around Platoro.

In the June, 1982 Presidential letter to Congress recommending the Conejos River for inclusion into the Wild and Scenic River System, there was a provision to eliminate approximately a 2 mile segment below Platoro Reservoir to meet public concerns by eliminating tracts of private land Both the 1985 Forest Plan and our current plan revision has complied with this provision and not included the tracts of private land below Platoro within the Conejos River W/S corridor segment and management prescription allocation

14 9 In alternative D, prescriptions for river segments are not compatible with protecting these river segments

The management prescription allocations (Px 1 5, p IV-14, Px 3 4, p IV-26, Px 4 4, p IV-32), standards and guidelines and resource protection measures (Chapter 3, p 308-310) are implemented to manage and protect the river corridors and values

15. Special Interest Areas

15.1 National Natural Landmarks and Special Interest Areas were not addressed in the DEIS.

In November 1994, the National Park Service (NPS) identified four potential National Natural Landmarks on the Rio Grande National Forest (Since 1989 there has been a *moratorium on new designations, but the NPS expected it to be lifted*)

The moratorium is still in effect, no previously inventoried areas or additional areas are being analyzed or designated We confirmed this after calling the NPS in February 1996. Because of the moratorium, addressing these areas is not necessary

Eleven areas were evaluated for Special Interest Area inclusion in the DEIS We believe an adequate range of Special Interest Areas was included

15.2 Why was Big Springs Special Interest Area dropped from consideration in the preferred alternative ?

Big Springs, a designated Picnic Area, is already protected from activities such as logging and grazing I

15.3 Alternative D, wisely, is the one containing the most acreage in the Blowout Pass Geologic Area. (A map of a recommended boundary was included with the comment.)

The boundary of the Blowout Pass Geologic Area SIA will be based the area's geologic and scenic attributes

15.4 Vehicle traffic should be off-limits in the Blowout Pass Geologic SIA; also, a picnic shelter/information booth should be built along the ATV trail about ½ mile west of Blowout Pass.

Vehicle travel will not be allowed in the delineated area of the Blowout Pass Geologic Area, *as is the case now Vehicle travel will be (and is) allowed only on marked routes* This includes the existing ATV trail and the Blowout Pass road to the Alamosa River

15.5 The respondent recommends Special Interest Areas in Alternative F Archaeological SIA's should be excluded from interpretation because of the potential for vandalism and collection of artifacts. These areas should still be managed to protect these assets.

A wider variety of Special Interest Areas has been presented in Alternatives D, B, and E than in Alternative F Archaeological Special Interest Areas excluded from consideration will be protected

15.6 What are the Planning requirement and legal framework for including Special Interest Areas in the DEIS? Also, there is insufficient disclosure of information in the DEIS to develop a conclusion on the value of these areas.

The Forest Service Manual (FSM 2372 03) states that it is policy to designate (or recommend administrative designation of) special areas with outstanding natural

characteristics These scenic, geological, botanical, zoological, paleontological, archaeological, or other special characteristics or unique values are to be protected and managed for public use and enjoyment Management direction shall be included in the Forest Plan

FSM 2372 2 states, "include an analysis of the need and desirability for special areas in the forest plan (FSM 1920 and FSM 1950) If a decision in the forest plan recommends designation, include management direction in the plan or in an amendment to the plan later "

The authority for administratively designating, preserving, and managing special areas within National Forests is found in the principal acts from 1897 to the present that authorize multiple-use management, and in 36 CFR 294 1 Potential Special Interest Areas were summarized in the DEIS Those chosen in the FEIS will be described in more detail

15.7 Management Area Prescriptions 2.1 and 2.2 will not accomplish their purpose. The designations just lock up more acres of land.

Special Interest Areas (2 1) allow grazing if it does not conflict with the values for which the areas are designated Livestock grazing is prohibited in Research Natural Areas (2 2), but all these areas are within vacant grazing allotments

15.8 Consider the "Effects on Plants from Range Management" section when analyzing Special Interest Areas

We will consider this section when developing management direction for each Special Interest Area

15.9 Grazing should be allowed in Special Interest Areas because long-term grazing has not affected them.

Each Special Interest Area will be assessed individually when developing the specific management direction

15.10 The size of Special Interest Areas should be increased for better protection of the resource

We will assess each Special Interest Area individually when developing final boundaries, this could increase or decrease their size

16. Heritage Resources

16.1 "I would have liked to have seen even more recognition of the importance to planning and management of the rich and distinctive cultural heritage of the SLV"

A discussion of the cultural heritage and traditional values of the people of the San Luis Valley as it relates to planning is included in the DEIS on pages 3-367 and 3-368 We believe that the subject was adequately addressed

16.2 The heritage resource standard should be "the National Forest will identify and protect archaeological sites on its property." Suggested guidelines were also stated.

The Heritage Resources Standard addresses the same items as the recommended standard Our compliance with all applicable federal, state, and local regulations will ensure that archaeological and historical sites on the Forest will be identified and protected.

The existing standard also addresses the recommended guidelines These include public education (required by ARPA), cooperative programs with avocational groups and other professionals (ARPA), and management in compliance with applicable laws Reporting heritage resource sites on Colorado Cultural Resource forms is standard practice and will continue to be so

16.3 **The years for Table A-4 are incorrect**

We will change the wording to "From 1970 to 1994"

16.4 **"We would like to call attention to two historic resource sites relating to military and exploration themes that you may not have inventoried. appropriate protection measures would be in order."**

We will inspect and record the sites and protect them if they are determined significant after analysis

16.5 **"I agree that archaeological sites should not be advertised by map-pinpointing and that protection of these resources should be maintained."**

As a means of protection, archaeological sites are usually not identified on maps, although some sites may be identified in order for the public to visit them

16.6 **"Under heritage resources, direction is to inspect 20% of protected sites within each project. This will not protect the resource! There must be site inspection of 100% of the sites in each project area."**

In most cases heritage resource sites are not within areas directly affected by projects, but are on the periphery Monitoring plan language has been changed to state that we will monitor all significant heritage resources that have a potential to be impacted by a project These specific sites will be identified in the heritage resource inventory report sent to the Colorado Historic Preservation Officer for review for the proposed project

16.7 **"Please guard some of the history of the wild forest by saving it as 'wilderness.' Grazing should be studied."**

Existing Wilderness is approximately 25% of the RGNF A study of the effects of grazing, including effects on heritage resource sites, is being conducted as a part of a Memorandum of Understanding with the Colorado Historical Society

16.8 **"The Plan does not adequately consider recreational impacts in the Heritage Resources assessment (DEIS 3-322) or in its prescriptions (standards and guidelines). The Plan suggests that these impacts are significant but then seems to ignore their significance. The Plan must fully and substantively consider recreational impacts in this assessment and it needs to clarify what the assessment is and how it is to be mitigated "**

The Plan notes the impact of the cumulative effects of non-sanctioned activities but does not note that these impacts are likely to increase as recreational activity increases (DEIS 3-325).

The heritage resources standard of complying with all applicable federal, state, and local regulations ensures that archaeological and historical sites associated with projects, including recreation projects and recreation impacts, will be identified and protected if determined eligible for the National Register of Historic Places Protection of heritage resources from impacts in areas of dispersed recreation is not as easily addressed The

public-education portion of the heritage program, done in schools and campgrounds, addresses site protection and the effects of vandalism, to a degree, on heritage resources

Recreation impacts on heritage resources also may decrease, because of the education efforts being done by the Rio Grande National Forest in area schools and organizations Certain types of recreational-use increases may also act to provide more citizen monitoring of important archaeological sites

16.9 **"We are very concerned that protecting archaeological and historic sites will take a back seat to grazing. "Under an agreement with the Colorado State Historic Preservation Office... Yet, this will only be possible given the money to conduct these searches. Grazing should only be allowed anywhere after such an inventory has been conducted."**

The negotiated agreement with the Colorado SHPO allows us to inventory, monitor, and evaluate areas with a high probability of finding heritage resources within areas of high livestock-grazing impact We see this as an effective way to address the protection of heritage resources from grazing, it makes sense to concentrate our efforts where significant sites and grazing impacts occur

17. Recreation

17.1 **The recreation-use projection is at 5% over the planning period, despite the fact the area will experience a 32% growth in population. The Final EIS needs to analyze impacts greater than 5% rec growth across the Forest.**

The 5% growth projection for dispersed recreation over the next planning period was a miscalculation on our part when the draft was written Dispersed-recreation use on the Forest over the past 6-7 years has averaged about a 2-3% increase annually, which is what we anticipate will continue during the next planning period The Final EIS will include a chart which shows our dispersed use the past 6-7 years and indicates this trend should continue

The 32% population-growth figure mentioned is a predicted trend for the Rocky Mountain region, which includes Colorado, Arizona, Utah, Wyoming, Nebraska, Montana, and North and South Dakota This is not a projected-growth figure for the San Luis Valley On page 3--367 of the DEIS, population growth for the SLV is estimated to be 1-2% per year over the next two decades

17.2 **Two growth rates are noted· a 5% growth rate over the planning period for dispersed recreation, and an annual growth rate of 3% for developed recreation. Explain the difference.**

The 5% recreation-use increase over the next planning period mentioned in the draft was a miscalculation on our part when we published the draft Our recreation-use figures on the Forest for the past 6-7 years for both developed and dispersed recreation have averaged about a 2-3% increase annually We expect this trend to continue within the next planning period This will be reflected in the Final Refer to the 17 1 response

17.3 **What process was used for the recreation-use predictions?**

The main source is our annual recreation-use reports, which we compile for our Regional Office and Washington Office, on developed and dispersed use on the Forest These figures are derived from daily-use figures taken by our campground managers in the Forest's campgrounds Ski area figures come from daily lift tickets sold and reported to the Forest at the end of the ski season

Dispersed-use figures come from a variety of sources, such as checking with the Colorado Division of Wildlife for fishing and hunting licenses sold within the valley, and taking random-sample counts of use in a particular area on roads, which is a basis for projecting use over a given period We also check with the local Chamber of Commerce and Great Sand Dunes National Monument to see if our annual-use increases or decreases are in line with the visitor-use figures they maintain

The DEIS did not have a chart of past developed and dispersed use on the Forest, or mention if this trend is expected to continue This will be incorporated in the Final

17.4 Define the Forest customer base which the Forest recreation management mix is set up to accommodate.

This was not mentioned in the DEIS, and in the Final we will incorporate what demographic information the Forest has

17.5 With growth in tourism and recreation use being considered, are your management objectives in line with stated recreation objectives?

We believe our recreation management prescriptions, objectives, and desired conditions reflect how we want to manage the Forest and meet our stated recreation objectives

17.6 The Plan fails to explain adequately how the Forest's financial resources will be allocated under varying allocations.

The DEIS addresses this comment on pages 3--371-373

17.7 DEIS Pg. 2--22 - Explain the chart.

The chart is a generalization of how each alternative would provide motorized or nonmotorized opportunities, should it be implemented The chart displays in numeric order the amount of roads and trails available for motorized use, with 1 having the greatest number and 6 the least

17.8 DEIS page 3--27: Table 3-5 shows the Rio Grande as having the lowest recreation use of any Forest in Colorado

That is correct The Rio Grande NF tends to be more of a destination point for prolonged stays, or has short-duration use when visitors pass through the Forest going to another destination, rather than being a Forest which receives continual and frequent use from people from major urban areas

17.9 DEIS Pg. 2-22· This chart details the ratio of nonmotorized to motorized recreation. Need to clarify. The chart clearly implies a management preference.

The intent of this chart is to show how the Forest intends to manage backcountry areas, by identifying the alternatives that offer a more uniform mix of motorized and nonmotorized opportunities Since the chart is subjective in nature, it does reflect some value judgements

17.10 Proposed Revised Plan Pg. II-4: Objective 4.1 contradicts other statements made in the document

Because there were no specific references to the "other statements" that contradict this objective, we cannot make an adequate response

17.11 Table S-15 in the Summary shows snowmobiles restricted to designated trails. Prescription 3.31 states motorized travel is restricted to roads and trails, except snowmobiles. Which is correct?

The prescription statement is correct The chart for the Backcountry Motorized prescription should show an "0" for snowmobiles (travel allowed off designated roads and trails)

17.12 There are no standards and guidelines for motorized activities for Category 4 (recreation) or 5 (landownership and access).

Standards and guidelines related to motorized activities are outlined in the Proposed Revised Plan, Forestwide Standards and Guidelines section, pages III--22-23, under Travelways Also refer to Chapter 4, Management-Area Prescriptions, dealing with recreation (px 1 31, 1.32, 3 31, 4 21, and 4 3) In the DEIS, see the Travel Management section (pp. III--355-363) and Table 3-93, pg. III--362

Standards and guidelines related to Category 5 objectives are outlined in the Proposed Revised Plan, Forestwide Standards and Guidelines section, pg III--21, Real Estate Rights-of-way and Land Adjustments

17.13 Proposed Revised Plan, page IV-8, backcountry nonmotorized prescription: ATVs should not be allowed

Your statement is correct The standard should read "ATVs, and retrieval of game with ATVs, are prohibited "

17.14 Page IV--27, Guideline 4: The criterion for public-use sites should not be visibility, it should be effects on wildlife and native vegetation.

The intent of this guideline is to keep public-use sites out of the Scenic River corridor From a scenic-integrity objective, if developed sites are proposed for construction, they are to be outside the corridor and screened so as to blend with the existing landscape. A proposed public-use site outside the corridor would require an environmental assessment, which would deal with all resource impacts and implementation of mitigation measures

17.15 Are standards in place to assure that recreation impacts do not adversely affect the health of the Forest?

Standards covered in the Forestwide Standards and Guidelines section (Proposed Revised Plan, Chapter III) are to be implemented to ensure various management activities maintain the health of the Forest

17.16 The Plan has inadequate standards and guidelines related to recreation impacts and ORV use.

Your comment is noted There are standards and guidelines outlined within the Forestwide Standards and Guidelines section (Proposed Revised Plan, Chapter III) that address recreation impacts in conjunction with physical, biological, and social resources Standards and guidelines related to ORV uses are addressed under the Administrative section of the Forestwide Standards and Guidelines

17.17 The Rio Grande NF needs a standard governing the use of ATVs/snowmobiles.

Refer to the Proposed Revised Plan, Forestwide Standards and Guidelines section, pg III--22-23, Infrastructure Travelways, and the standards in Chapter 4, Management-Area Prescriptions In the DEIS, see the Travel Management section, pg III--355-363, specifically Table 3-93, pg III-362

17.18 The DEIS did not address recreation resources in sufficient detail to include accountable standards and guidelines.

The DEIS on page 1--8 describes the purpose and need for revisions in the Plan related to recreation issues Specific details of the recreation program are outlined in the DEIS on pages III--326-333

Accountable standards and guidelines related to recreation impacts are covered in the Forestwide Standards and Guidelines section of the Proposed Revised Plan (pp III--1-24), which includes the physical, biological, social, and administrative resources

Chapter 4 of the Proposed Revised Plan outlines the management-area prescriptions for recreation (Px 1 31, 1 32, 3 31, 4 21 and 4 3), including the desired conditions and standards and guidelines .

17.19 *The Plan includes very few standards and guidelines related to recreation in other* categories It needs to include better standards and guidelines to insure proper management of recreation impacts in these prescriptions.

In Chapter III, the Forestwide Standards and Guidelines section specifies the applicable standards and guidelines in the physical, biological, social, and administrative resources which address recreation impacts. These Forestwide standards and guidelines apply when implementing the management-area prescriptions in order to assess recreation and other *impacts*

17.20 Proposed Revised Plan, page IV--23, Limited Use Area Management Px, Standard 3: Change to read, "Snowmobiles will be prohibited unless specifically allowed."

Your recommendation is noted and will be considered

17.21 Proposed Revised Plan, page III--23, Guideline 1: This implies there is current overcrowding. Trails should not be expanded.

The guideline does not imply overcrowding It identifies various objectives which are to be addressed when new trails are proposed the desired recreation setting and available recreation opportunities, user safety, and the need for dispersing various recreation uses The preferred alternative did not propose any new trail-expansion work

17.22 Page III--19, Guideline 6: Riparian areas should be added to the guideline.

This concern is covered in the Watershed Conservation Practices Handbook, which the Final will detail

17.23 Pages IV--8 and --10, Px 1.31 and Px 1.32; and pages IV--25-26, Px 3 31: Consider rewording the standards and/or guidelines in reference to livestock

Because of the recent Diamond Bar decision, these standards and/or guidelines will be revised

17.24 Px 5.41, Standard 1: Change to prohibit all motorized-vehicle use when deer and elk *are present.* Px 5.42, *Standard 1 is good.*

There are current restrictions in place to protect deer and elk winter areas Seasonal closures to motorized use are put in place when deer and elk traditionally use these areas During the rest of the year, travel is restricted to designated roads and trails

Standard 1 in Px 5 42 will be revised because of the recent Diamond Bar decision

17.25 The Forest needs a standard for developed sites: All developed areas will be discretionary, no lease for oil and gas

Guideline 4 under management-area prescription 4 3 allows for oil and gas leasing with controlled-surface-use stipulations to protect the developed sites Since these areas do not fall under the legally unavailable lands outlined in the Leasing Reform Act, they are legally available for leasing

17.26 Proposed Revised Plan, Standard 3, Page III--23: Rewrite the last sentence in the standard to read, "Snowmobiles are prohibited unless specifically allowed." Delete guideline 1

Your recommendation will be assessed The literature will be reviewed to evaluate whether restrictions are needed on snowmobiles. Your comment in regard to guideline 1 is noted Refer to the Rec 21 response

17.27 We support your capacity determination, closing and rehabilitating of damaged dispersed sites, and limiting dispersed camping near lakes and streams

Thanks for your comment and support

17 28 What is the basis for the claim Alternatives D and E have an even mix of motorized verses nonmotorized uses?

The statement was based on the areas allocated to motorized or nonmotorized prescriptions associated with each alternative for the specific purpose of managing these areas for motorized or nonmotorized recreation

Since we did not have our trail inventory in GIS when the draft was produced, our statement was based on acreage calculations for each of the backcountry allocations in conjunction with each alternative We will be reanalyzing our backcountry areas (identifying which trails will be motorized or nonmotorized) and now have our trail inventory in GIS, and will incorporate these revisions in the Final

17.29 Px 1.31 should prohibit motorized-vehicle use.

This prescription does prohibit motorized use Refer to the chart on page IV-2 of the Proposed Revised Plan and, in the DEIS, Table 3-93, Page III--362

17 30 Consider management Px 1.31 for managing unroaded areas. Use Px 1.31 in the Final.

Trails within backcountry areas designated for motorized or nonmotorized use will be reassessed and identified in the Final, in order to better show trails available and managed for these uses The backcountry motorized and nonmotorized prescriptions will also be reassessed and any revisions or deletions incorporated in the final

17 31 The Colorado Association of 4WD supports Alternative B, with the inclusion of backcountry recreation with limited winter motorized use.

Your support for Alternative B is noted The purpose of the Plan revision is to assess various alternatives and determine which best meets local and national objectives and needs

17.32 Px 1.31 and 1.32 should be reserved for hikers and horseback riders Motorized and mountain bike uses should be restricted on the Continental Divide National Scenic Trail--consider this as a guideline

Prescription 1 31 is intended for management of areas for nonmotorized uses

Trails outside wilderness are being reevaluated, and trails in the backcountry areas will be identified as available and open for nonmotorized and motorized users

Your recommendation for restricting motorized and mountain bike users from using the Continental Divide trail will be considered

17.33 Modify the Plan by characterizing the Continental Divide National Scenic trail as a new management area with standards and guidelines.

The Continental Divide National Scenic Trail corridor is identified on our alternative maps and carried forward in the Final Standards and guidelines are in place to manage and maintain this trail

17.34 The Blanca Peak/Como Lake area is shown as a motorized management Px.

The road corridor up to Como Lake is to be managed for motorized use, the remaining area is to be a nonmotorized backcountry prescription This will be corrected in the Final

17.35 Alternative D has too much emphasis on motorized-recreation opportunities to be consistent with biodiversity values. You are opening undeveloped areas needed for protecting wild species.

Your comment is noted Trails in backcountry areas are being reevaluated and will be identified in the Final as open and available for motorized or nonmotorized users

17.36 I oppose management Px 1.32, which allows indiscriminate snowmobile use in backcountry areas.

Your comment is noted The literature will be reviewed to assess whether restrictions are needed on snowmobiles

17.37 The Forest Service can't enforce the roadless Px outside wilderness. Foot trails have been upgraded to motorized trails. What will the Forest Service do to stop this activity?

Backcountry areas will be managed to meet management area objectives, and standards and guidelines will be implemented and monitored to determine if the desired management conditions are being met Trails identified for motorized use in backcountry areas will be managed and maintained to meet motorized trail standards

Trails will be identified at trailheads as to appropriate and available uses Enforcement of travel management restrictions within backcountry areas is a tool used to manage these areas

17.38 The description of Px 1.31 and 1.32 states "ATV game retrieval off roads and trails is prohibited and ATV game retrieval is prohibited." Clarify what Px 1.31 and 1.32 allow with respect to ATVs.

The ATV-game-retrieval standard for both Px 1 31 and 1 32 should be "ATV game retrieval is prohibited "

17.39 The Plan needs to clarify whether or not Px 1.32 is included as nonmotorized.

Because recreation opportunities can be managed based on summer and winter objectives, it is possible to manage an area as "nonmotorized in the summer," which would categorize it as nonmotorized In the winter, since snowmobile use is allowed, the

area would be categorized as "motorized during the winter " If no snowmobile use took place in the area, it would remain nonmotorized

17.40 In the Recreation section of the DEIS, under experienced budget levels (all alternatives), the Plan does not display or discuss the relative trade-offs between program levels.

On page III--336 of the DEIS (Recreation section), the budget-level trade-offs between alternatives are discussed Pages 3--371-373 display the budget percentage for all resources (Table 3-98), and Table 3-99 shows the experienced and full budget levels for all resources, by alternative

17.41 The effects on the timber and recreation programs are significantly different. The consequences of the budget shortfall seem to be maintained service standards for most recreation categories.

The consequences associated with the budget shortfalls reflect those recreation-program items which cannot be accomplished because of the reduced budget They do not include maintaining the service standards for all the recreation-program categories

17.42 All alternatives, except B, restrict use of ATVs to roads and trails. In Alternatives A and E, snowmobiles are restricted to roads and trails. These restrictions are not justified.

The travel management direction for the Forest is found in the Travel Management section in the DEIS, pages III--355-56. The restrictions are justified in that they are in line with the management-area objectives and desired conditions described in the Plan

17.43 Many prescriptions addressing wilderness and recreation evaluate the degree of solitude and spirituality likely to be found in the particular prescription. Equating spirituality with solitude is a value judgement.

Your comment is correct, but many decisions are based on personal or cultural values Pursuit of recreation activities and experiences, and the areas we choose to recreate in, are based on personal choices, preferences, and experiences that are value-related

17.44 Constraints on motorized recreation are common to all alternatives. These prevent a true range of alternatives. You should develop alternatives which demonstrate the benefits of motorized travel and Forest access.

The range of alternatives included in the DEIS reflects the mix of management prescriptions which allow or do not allow motorized access and travel on the Forest Development of new travel management alternatives is not required

17.45 Alternative D contradicts the objectives in Forestwide Category 8 (refer to the Proposed Revised Plan, page IV-42) How can the Forest possibly diversify and promote tourism if Forest access and recreation choices are reduced?

The preferred alternative neither reduces access to the Forest nor reduces recreation choices Under Alternative D, some 2,200 miles of roads and 1,251 miles of trail on the Forest provide sufficient and ample access The allocated recreation prescriptions (APP 485,192 acres) in Alternative D offer an array of recreation opportunities and activities, which enhances and expands rural-development and tourism opportunities The challenge is not reduced choices, but coordinating and cooperating with the tourism industry to establish common goals and objectives

17.46 Given the various tables in the summary, I am unable to determine the exact ratio of the different types of recreation areas.

The tables listed in the Summary are mutually exclusive to the categories discussed Table S-1 reflects the acres by alternative allocated to the various management-area prescriptions The purpose of this table is to compare by alternative the management-area prescription allocations Table S-9 reflects the management-area prescription allocation by alternative for the unroaded areas on the Forest Table S-12 reflects the recreation settings on the Forest under our current Forest Plan management The mix of recreation settings does change by alternatives, and is reflected in the DEIS, page III-337, Table 3-87

17.47 I reject alternative D, which reduces forest access and devotes much of the forest to nonmotorized recreation Roadless acres represent prime recreation areas which should be shared by all, and some timber harvest should occur, to preserve forest health.

Your statement is correct in that Alternative D allocates a majority of the unroaded areas to be managed for nonmotorized-recreation opportunities This neither reduces access to the Forest nor is detrimental to its health

In the broader context of how the Forest is to be managed, these nonmotorized areas represent only 18% of the total Forest acreage; some 60% of the Forest is available to a variety of recreation uses and management activities

17.48 Alternative D puts excessive restrictions on snowmobiling, proposing to close or restrict snowmobiles on 48% of the Forest.

Travel restrictions are implemented to meet management-area objectives and desired conditions, and prevent resource impacts Snowmobiles are restricted to roads and trails on 23% of the Forest, not prohibited altogether. In fact, they have access to about 70% of the Forest (in either open or restricted-use areas)

17.49 Some believe their favorite 4-wheel-drive road will be closed in Alternative F.

Under this alternative, approximately 642,773 acres are allocated to core areas or limited-use areas, with the desired-condition objective to close or obliterate roads within five years Implementation of this alternative would close a substantial amount of travel routes on the Forest.

17.50 Category 4 prescriptions allow timber harvesting. Vegetative treatments used to enhance viewing opportunities have nothing to do with ecosystem management.

Timber harvesting (vegetative treatment) within these prescriptions is allowed and implemented to meet recreational and scenic-management objectives The ecological structure, function, and composition of the landscapes within these management areas are instrumental in determining the size and amount of vegetation treated, in meeting the scenic and recreational objectives

17.51 Prescriptions 1.31 and 1.32 should not be limited to "plant communities generally not found" in wilderness areas.

This was an emphasis item mentioned in the management-area prescription desired condition Under the various alternatives, the backcountry nonmotorized prescription was allocated to many of the unroaded areas, and not just limited to those unroaded areas having plant communities generally not found in wilderness areas

17.52 In Prescription 1.41, the recreation setting should be primitive and the scenic-condition objective should be preservation.

Your recommendations are noted

17.53 I do not understand how closing miles of roads, greatly reducing nonmotorized use, and designating seven research natural areas can be beneficial for recreation. Sightseeing, fishing, and hunting will decrease substantially.

Your concerns and assumptions are invalid Alternative D allocates a mix of recreation prescriptions (Px 1 32, 3 31, 4 21, 4 4) and experiences (both motorized and nonmotorized) on approximately 485,100 acres, while maintaining about 2,200 miles of roads and 1,251 miles of trails on the Forest This provides recreational users access to the Forest for a variety of opportunities, activities, and recreational benefits

The proposal to close some roads for resource and management purposes, and allocate some backcountry nonmotorized and research natural areas, does not affect the recreation opportunities or benefits provided for under Alternative D

17.54 Elderly and handicapped persons will be restricted from enjoying the Forest if Alternative D is implemented.

The elderly and physically challenged are capable of enjoying and using the National Forest as well as any recreational users Alternative D offers a mix of opportunities and challenges for all users

Not every area of the Forest needs a road, nor does every trail have to be motorized, in order for people to use or enjoy the Forest The variety of uses and choices is part of the recreation experience

17.55 Instead of de-emphasizing recreation and limiting use, Alternative D specifies loop trails, campground upgrades, and more signage, to turn the Forest into a California-type park.

We are required by 36 CFR 219 21 to provide for outdoor recreation opportunities in each alternative The Plan is to identify recreation opportunities on the Forest and appraise the supply of developed recreation facilities, for their adequacy to meet present and future demand

The recreation opportunities and facilities to be offered on the Forest are based on projected recreation-use trends and the Forest's ability to meet expected recreational increases during the next planning period This will not transform the Forest into "a California-type park "

17.56 The management prescriptions in Alternative D and proposed recreational development do not reflect the need to hedge and restrict this expansion.

The purpose of the Plan is to outline the Forest's recreation program and assess our ability to provide recreation facilities and opportunities, based on projected recreation use

17.57 If the Forest Service cannot show that an activity can be adequately monitored or is not in need of monitoring, the activity should not be allowed Recreation effects on conditions need monitoring

In the Monitoring and Evaluation section of the Plan (Chapter 5), the monitoring of recreation uses is contained in the Strategic Monitoring Plan (pp V--6-7) and the Tactical Monitoring Plan (pg VII--11) Legally required monitoring and evaluation items are specified in 36 CFR 219 12(k) and 219 27 Other resource items can be monitored, but we are not legally required to do so

The monitoring approach will be reevaluated and revisions incorporated in the Final

17.58 The Plan fails to include the results of the monitoring and evaluation program (with reference to the recreation program) during the previous planning period.

Chapter 1 in the DEIS deals with this concern Our monitoring-report recommendations *regarding recreation and travel management are outlined on page 1--8*

17.59 An effective management strategy must fully consider the potential environmental impacts of recreation activities.

The DEIS describes the potential impacts of recreation activities on pages III--335-339 Recreation impacts associated with the other resources are addressed under the Environmental Consequences section for each resource in Chapter 3 of the DEIS

17.60 There is no provision in the Monitoring and Evaluation section to monitor/assess snowmobile or ORV use.

In the Strategic Monitoring Plan section of the Proposed Revised Plan, this concern is addressed under the General Infrastructure (Travel Management) section on pg V--7, and in the tactical monitoring section on pg. V--12, Travel Management Annual monitoring of the Forest's travel management plan and direction is to be accomplished

The Forest's monitoring strategy is to be reevaluated, and revisions will be incorporated in the Final

17.61 Under Alternative E, the preponderance of recreation uses, and their potential impacts, require monitoring not currently possible with existing funding. It is unclear whether site-specific protection and management needs for Colorado Natural Heritage Program-identified sites are met with this alternative.

In the Introduction section of the Monitoring and Evaluation Strategy chapter (pg V--1), it states the Forest will allocate funds from the annual budget to accomplish the monitoring *and evaluation of the Plan The Forest's monitoring strategy is to be reevaluated, and* revisions will be incorporated into the Final

The Heritage Resources standard of complying with all federal, state, and local regulations assures that archaeological and historical sites on the Forest will be identified and protected.

17.62 Have a permit system for all Forest users (summer and winter activities)

The dispersed-recreation Forestwide standard (Number 4) addresses this concern. Management actions will be implemented, should use exceed area capacity and have impacts or effects on the recreation setting The monitoring of the Forest's capacity assessment and allocation will determine if management actions are needed

17.63 Promote the concept of having all users pay their own way.

Fees that the Forest Service implements must be authorized by Congress It must enact legislation authorizing fees for users who recreate on the National Forests

17.64 *We do not endorse a systematic user-fee or permit system.*

A systematic user fee cannot be implemented unless Congress authorizes user-fee legislation A permit system will not be implemented unless monitoring indicates use exceeds the established area capacity, and is causing significant resource impacts

17 65 Do not promote or emphasize recreation. It invites overuse.

The public wants and deserves information about the Rio Grande NF's recreational opportunities and facilities, and the Forest will continue to supply it

17.66 Recreation must be de-emphasized and limited outside reserves.

One of the purposes of the Forest Plan is to outline our recreation program and assess our ability to provide a wide range of recreation opportunities, based on current and future user demands

17.67 Encourage/promote responsible and low-impact recreational use.

One of the stated objectives of our recreation program is to expand our interpretive services This will include environmental-education programs and interpretive services about low-impact recreational techniques and responsible visitor behavior

17.68 We depend on the Forest for recreation. Do not close it to recreation opportunities.

Recreation is an integral part of the Plan, which allocates numerous prescriptions for the management and enhancement of recreational opportunities on the Forest You will continue to be able to recreate on the Forest

17.69 If the Forest limits access and people, the Valley will lose tourists. I disagree with the proposal to further restrict access to the Forest.

Access to the Forest is not being limited or restricted We plan to manage and maintain roughly 2,200 road miles and 1,251 miles of trail, which is sufficient access on and to the Forest Limits on people will occur only if use exceeds area capacity, and causes significant resource impacts or affects recreation-setting objectives

17.70 Limit/restrict mountain bike use.

Direction in the Forest Service Manual (section 2353 03) states we will provide a diversity of trail opportunities for experiencing a variety of environments and modes of travel, consistent with the National Forests' recreation role and land capability Mountain bikes are an appropriate mode of travel on Forest trails, except in wilderness areas, where they are prohibited

17.71 Have developers and concessionaires pay more fees.

Fees assessed special-use permittees come under a variety of laws and fee-calculation requirements Special-use permittees pay the government appropriate fees, based on the regulations and fee determinations mandated by Congress.

17.72 I propose converting the Forest to a National Recreation Area.

It would take Congressional designation to establish the Forest as a National Recreation Area Certain areas within the Forest have been discussed for this type of special designation, but dropped from consideration because they do not meet the criteria for national designation

17.73 Roadless areas are a commodity.

We agree The purpose of the Plan is to assess these areas and determine how they will be managed during the next planning period

17.74 The DEIS did not develop a desired condition for recreation.

The desired conditions for recreation are described in two places the proposed Land and Resource Management Plan, Chapter 1, pages 1-4, and in the DEIS, Chapter 3, page III--327

17.75 In Chapter 2 of the DEIS, the Recreation and Travel Management section under Alternative NA implies recreation occurs on only 6% of the Forest, then falsely states that the remainder of the Forest is allocated to prescriptions that emphasize commodity uses.

Your statement and assumptions are incorrect In Chapter 2 of the DEIS, which outlines the general description of each of the Plan alternatives, under the No Action Alternative, it states. "Under the 1985 plan, only about 6% of the Forest is allocated to recreation, while the remainder is allocated to prescriptions that emphasize commodity uses " It does not imply **where** recreation occurs, but **how much** of the Forest has been allocated to recreation prescriptions

17.76 The word "principal" should be used to describe recreation, rather than "primary"it's good to have several important sectors, as opposed to featuring just one.

Your comment will be considered

17.77 Because of the geographic remoteness of the Forest from major urban centers, it is unlikely it will experience the same level of use as other Forests

Management of the Forest's recreation program is based on an assessment of our ability to provide a wide range of recreation opportunities, considering both current and anticipated user demands We intend to make available sufficient recreation opportunities and settings to meet visitor expectations and projected use

17.78 Object 66 Expand to include damage from hikers, bikers, and horse users.

This objective is a Regional objective, and Regional in scope The Soil and Water standards and guidelines address these impacts, and will be implemented to protect soil and water resources

17.79 We recommend adding the following to the Series 4 objectives: "Maintain the integrity of recreational resources, public access, and recreation choices for people to enjoy the Forest in a variety of ways."

Thanks for your recommendation Forestwide Objective 4 5, "Provide a diverse range of outdoor recreation opportunities ", accomplishes the same purpose and intent as your recommended objective

17.80 With budget and personnel reductions, some type of recreation should be de-emphasized.

The DEIS on page III--336 describes, by alternative, what recreation programs and activities will be impacted as a result of budget shortfalls

17.81 You have given me a good idea of how valuable the recreation aspect of the Forest is.

Your comment is noted and appreciated

17.82 "Humans are part of the ecosystem"--You cannot interpret this to mean any number of humans, anywhere in the winter backcountry, at any time.

Not all backcountry areas, or all areas on the Forest, are used for winter activities The intent of the Forestwide capacity-allocation process is to establish area capacities for the various seasons, and monitor existing uses to determine if management actions are needed to prevent overuse of an area

17.83 The current management team thinks management of the Forest is best done when trimmed towards wilderness and semi-primitive status

The plan reflects more than just the thinking of the management team It reflects the input and concerns of our stakeholders (our publics), needed changes, mandated laws and regulations, and good stewardship of the Forest resources

17.84 In its emphasis on driving for pleasure and the need for improving the road network, the Plan fails to analyze how timber harvesting, with its associated roads, could enhance this use.

The Travel Management section of the DEIS on pg III-359 discusses new road construction associated with timber harvest With 2,200 miles of roads to be maintained on the Forest, there are sufficient opportunities for visitors to explore and access the Forest

17.85 The Plan indicates recreation is the answer to local and regional economic stability

Table 3-104 on page 3--380 of the DEIS displays the Forest's contribution to the San Luis Valley's economy Recreation does play an important role, along with the Forest's other resources, in contributing to the area's economy

17.86 The cumulative impacts of planned increases in the recreation sector were not considered.

You are correct, and this will be addressed in the Final

17.87 In the Proposed Revised Plan, the "Maximum Use and Capacity Levels" Table on page III--18 should indicate clearcuts 80-120 years old should be High capacity and clearcuts 20-80 years old should be Moderate capacity

Your comment is noted and will be assessed Revisions will be reflected in the Final.

17.88 The Forest should not attempt to fulfill the demands/desires of all recreation users.

We are required by the planning regulations to outline the Forest's recreation program and assess our ability to provide a wide range of recreation opportunities and facilities, based on current and anticipated recreation demands Given this mandate, the Forest should ask for, plan for, and meet Forest visitors' expectations and desires, based on the land's capability and protection of natural resources

17.89 You should insure that much of the Forest is available to accommodate the increase in recreation use.

This is the purpose of analyzing the various alternatives described in the Plan--so that recreational facilities, areas, and opportunities are assessed for their adequacy in meeting current and future use and demands

17.90 The basic weakness of the DEIS is the lack of real attention to recreation

We recommend that this respondent read pages III--326 through III--339 of the DEIS

17.91 The Forest assumes the timber and recreation programs are mutually exclusive.

In some ways these resources are mutually exclusive (timber is a physical resource, recreation is a social one, timber goals and objectives differ from recreation goals and objectives), and in other ways (implementing standards, meeting desired conditions) these resources are integrated

17.92 I'm not convinced the Forest's role is to improve facilities where private enterprise could provide facilities and services to meet demand.

Our role is to provide recreation facilities and opportunities within a variety of recreational settings Private enterprise cannot provide the recreational settings for camping (both developed and dispersed) which visitors want and expect

17.93 Location, cost, and capability to meet demand are not stated--a demand analysis is not present.

The use and demand information was excluded from the Draft It will be included in the Final.

17.94 The DEIS lists increases in acreage for the ski area--but has no maps or discussion of where these increase would occur. Why the increases and why no explanation for them?

On page III--332, in Item 2, Ski Areas, the last paragraph explains the reason why the ski area may expand The ski area has two boundaries One is the permitted boundary, which is the current developed ski area, the other is the development boundary, which is the area allocated for potential future expansion The development-boundary area is just east of the waterfall area and extends east from the ridge top to the area above Alberta Lake.

Both the permitted and development boundaries are shown on the alternative maps Future development of the ski area requires a new master development plan and analysis

17.95 Check the possibility of relocating Mix Lake campground.

The Forest has no substantial reasons or need to relocate this campground

17.96 Could Mix Lake campground be opened earlier and closed later each year?

The opening of Mix Lake depends on yearly snow conditions in the area If we have a typical snow year, we have to wait until the snow has melted from the campground so that it is accessible for opening The closure of this campground is associated with visitor use and the cost of operating the campground beyond mid-September The District does keep other campgrounds open during the fall for campers to use

17.97 The Plan does not address the potential impacts associated with expansion of the Wolf Creek Ski Area.

The purpose of the Plan revision is to guide all resource management activities on the Forest It establishes management standards and guidelines, describes resource management practices, and identifies available lands for resource management

The development-area boundary associated with the ski area is an allocation issue which is addressed in the DEIS The future development and expansion of the ski area, including potential development of the private land, is more site specific It is tied to a new master development plan, associated routes and upgrade of the electrical and natural gas lines, and other proposed facilities, lift lines, and ski terrain on the Forest

Scoping and an environmental analysis (EIS) of Wolf Creek's new master development plan will be required once the plan is submitted and we know all the aspects of development and the associated impacts

17.98 Do not expand the ski area. What is the status of Wolf Creek's expansion?

The expansion of the ski area will be assessed once the ski area submits a new master development plan

17.99 Leave campgrounds open year-round so people can use them.

It is not cost efficient or practical to leave the campgrounds open year-round During the winter, snow and freezing conditions make them inaccessible

17.100 The proposed expansion of facilities in the Elk/Aspen complex has no place on the Forest.

This proposal is being addressed by the District in an environmental assessment and decision notice The "purpose and need" and reasons for this proposed project are specified in the environmental assessment Future implementation of this proposed project is under assessment, per an appeal

17.101 Recreation development must not damage natural features of the Forest

The design of all recreation facilities takes into account the physical layout of the land and the need to incorporate the design of the facility with the existing landscape Any recreation reconstruction or development work has to be scoped and assessed, and a decision issued, prior to project implementation

17 102 We are concerned about the recreation-residency policy described in Chapter 2720 of the Forest Service Manual.

Chapter 2720 deals with permit issuance being consistent with Forest plans We have addressed recreation summer homes in our Forest Plan revision, and reissuance of these permits will be consistent with direction in the Plan

17.103 There is little evidence to support the Forest Service's contention that recreation facilities need expansion

In outlining the proposed projects on the Forest, we did not include the reasons for them We will include them in the Final

17.104 Why should the Forest increase capacity to satisfy 100% demand of maximum use?

The Forest is responding to the need to rehabilitate our campground units to accommodate current RVs and large trailers Our intent is not to meet 100% of all demand, but to accommodate the needs of our visitors within our existing campgrounds

17.105 Recreation use should be developed slowly, with study and planning.

This is the intent of the Forest Plan revision The Plan assesses the ability of the Forest to provide a range of recreational facilities and opportunities, based on current and future user demands

17.106 All developed campgrounds on the Forest should be fee areas.

Of the 36 campgrounds on the Forest, only four are not fee sites Until Congress changes the fee regulations, however, fees collected cannot be retained on the Forest, to be put back into these sites for maintenance purposes

17.107 I do not support the level of recreation development. It is biased towards recreation.

Your comment is noted

17.108 We support improving existing campgrounds, to control resource impacts and reduce the amount of dispersed recreation.

We appreciate your support

17.109 We recommend no additional campgrounds or capital facilities be planned for Chama Basin.

There are no proposed recreation facilities planned for the Chama Basin area, with the exception of maintaining the existing trail network

17.110 Do not change 30 Mile Resort.

No substantial changes are planned for 30 Mile Resort

17.111 Managing the Forest includes limiting the number of people, and disseminating public education on low-impact travel ("Pack it in--pack it out!")

These issues are addressed in the DEIS Area-capacity determinations and monitoring of use on the Forest will be implemented, and the Forest's environmental-education and interpretive programs deal extensively with "Leave No Trace" and low-impact techniques

17.112 The capacity process: How are the percentages between backpackers and stock broken out? How will use be affected? How long will the current allocation last?

Once the determination and allocation are established, we will look at the mix of uses occurring in each area, if warranted, service days will be allocated by type of use The amount of use in an area will be established by the capacity process

Use will have to be monitored in order to determine if adjustments or reductions are needed The current allocations will remain in effect until the Plan revision is approved and the area-capacity determination and allocations can be implemented and assessed

17.113 The Plan fails to explain the status and future of new commercial-recreation use permits.

You're correct This will be addressed in the needs assessment, which will be incorporated in the Final

17.114 The capacity determination needs adjusting, and the moratorium needs extending, until realistic use figures are developed.

The capacity-determination calculations are being reevaluated, and adjustments made, to bring the service days into more realistic projections These will be shown in the Final (in an appendix) The moratorium will be in effect until the Plan is approved

Once the capacity determination and allocations are implemented, monitoring of use and the allocations will be necessary, to determine whether adjustments are needed

17.115 Credit outfitter-guides who teach minimum-impact techniques to their clients

This suggestion has been researched and discussed, but currently there are no legal authorities available to the Forest Service to authorize credits of this nature

17.116 Regulate outfitter-guide drop camps.

The number and location of drop camps are specified in the outfitters' annual operating plans, which are approved by the Ranger Districts

17.117 Educate people to share and partner to manage trails.

Sharing types of use on trails is occurring Signing of trails for the types of uses allowed on them is planned under this Plan revision The Forest has worked with a variety of trail groups and volunteer groups to assist with the management of our trail system, and will continue to do so

17.118 Eliminate horse use

The direction in the Forest Service Manual (section 2353 03) is "Provide a diversity of trail opportunities for experiencing a variety of environments and modes of travel consistent with the National Forest recreation role and land capability " Horse use on trails is an appropriate use on the Forest trails, and we will continue to offer this opportunity

17.119 The Continental Divide National Scenic Trail needs more protection.

The Continental Divide National Scenic trail has been identified on the Forest alternative maps, and there are standards and guidelines in place that will protect it Further protection is not warranted

17.120 Management of the Continental Divide National Scenic trail by the Forest falls short of meeting both the spirit and the letter of the National Trails System Act (P.L. 90-543). This federal statute is entitled to the same weight as any other statute that governs your management of the Forest

This trail has had the status, importance, and intent of the National Trails System Act, both in our current Plan and in our revised Plan This trail is entirely in place on the Forest, with various sections maintained each year, both by volunteer groups and Forest crews

This trail offers opportunities to view and access various areas of the Forest The intent and purpose of the National Trail System Act, in reference to the Continental Divide National Scenic trail, has therefore been met by the Forest

17.121 The Forest has made no effort to ensure adequate, unpolluted water for users on the Continental Divide National Scenic trail.

At the time the Forest did its scoping for the EIS to construct the remaining section of the CDNST and reconstruct other portions of the trail, the issues about lack of sufficient water sources, polluted water sources, and damaged sections of trail were not raised Your concerns are noted and will be given to the Districts to consider and implement

17.122 The Forest needs to educate trail users, and install trail signs, on the types of uses allowed on trails.

Expanding our interpretive services (which will include information on trail use, etiquette, and safety) and the signing of appropriate modes of trail use on Forest trails are to be implemented with the Forest Plan revision

17.123 Limit or eliminate the use of illegally made "trails" or "short trails" that have no apparent destination.

As part of the planning process, trails on the Forest are being assessed as to which will be placed on the Forest trail inventory and maintained on a scheduled basis Trails not on the inventory will not receive maintenance work, and will require future assessment and documentation as to their continued use

17.124 *On page III--17, the standard indicates camping will be limited to 14 days within a 30-day period.* How does this apply to outfitter-guides?

Since your use of the National Forest and campsite location are approved and authorized by a special-use permit, this standard would not apply

17.125 DEIS Chapter 3, page 360. Existing hiking trails should not be converted to ATV trails.

The direction in our Forest Service Manual is "Provide a diversity of trail opportunities for *experiencing a variety of environments and modes of travel consistent with the National* Forest recreation role . and land capability" (section 2535 03)

One of the purposes of the Plan is to determine which trails on the Forest will be open and available to motorized users Trails identified as ATV routes will be constructed to the standards needed to maintain the trail tread, protect resources, and ensure safety

17.126 Open cross-country ATV travel should not be allowed.

The only time cross-country travel is allowed with ATVs is during hunting season, to retrieve downed animals The Forest is reevaluating where open travel for game-retrieval purposes will be allowed, and this will be included in the Final

17.127 You are increasing too many trails for motorized use. Motorized vehicles in the Forest are becoming a problem.

The Forest is reevaluating all trails outside wilderness areas, to determine which will be open and available to motorized users and/or nonmotorized users These trails will be *identified in the Final*

17.128 Make the Colorado Trail nonmotorized from Windy Point to Kite Lake.

In our reevaluation of the trails on the Forest, your comments will be considered Those trails open to motorized and/or nonmotorized users will be identified in the Final

17.129 Restrict trail bikes to Crater Lake.

With the enactment of the 1993 Wilderness Act, the Montezuma Peak area, which includes Crater Lake, is now part of the South San Juan Wilderness All forms of mechanized vehicles are now prohibited from this area

17.130 Trails are important. The Forest should mark and maintain them on a rotating basis, to slow erosion.

Trails on our Forest trail inventory (some 1,251 miles) are marked on the ground (by Trail #) and are on a priority-maintenance schedule Some are maintained yearly, others on a *two-year basis, and others every three years*

17.131 The Forest has enough roads and trails.

See the DEIS, page III--358 "The miles of Forest Development Trail are expected to remain constant throughout the 10-year planning period Short sections of new trail will be considered to create loop opportunities "

17.132 Add unused areas to existing ones, to further spread use.

In the preferred alternative, there are 524,692 acres allocated to the management of a variety of recreation uses in backcountry areas

17.133 We need a stronger and better emphasis on recreation opportunities.

Thanks for your comment We recommend you read the DEIS, pages 3--326 through 3--339

17.134 Stock damage the land Outfitter-guides take care of their area by going "light on the land."

Thanks for your comment

17.135 The Interpretive Plan for Wheeler Geologic Area should be available for review.

An interpretive plan for the Wheeler Geologic Area has not been developed a proposal has been made for the design and development of three interpretive signs (to interpret the geology of the area, its fragile ecosystem, and either the history of the area or wilderness information) for future installation at the entrance to the Geologic Area

17.136 Where would an incremental increase in the Forest budget benefit driving for pleasure, and how would it affect budget changes--revenues, benefits, or use on the Forest?

Incremental increases in the recreation budget are not tied to individual recreation activities, but instead to the administration and management of all the recreation programs, which benefit and provide opportunities to a variety of recreation users

17.137 The term "motorized trail' implies a trail is for motorized use only. Others can enjoy the trail in concert with motorized users.

The term "motorized trail' means the trail is open and available to motorized users Also, it implies that those who use this trail will likely encounter motorized users

17.138 Trails monies received should be used to keep all trails useable.

Budget reductions over the past several years, especially in trail maintenance, have made it difficult to maintain our existing inventoried trails annually We have established a priority-maintenance schedule to ensure trails on the Forest receive maintenance work

17.139 Construction of monster trails is not necessary.

Trails are constructed to meet standards established for the type of use which will occur on them, so they will be safe and useable, and provide for resource protection

17.140 The reality of Forest Service damage control is that use is concentrated in small areas.

Alternative D allocates a mix of various recreation management prescriptions which offer a variety of recreational opportunities, activities, and use throughout the Forest

17.141 The Forest needs more trails for bicyclists, hikers, etc.

The Forest has 1,251 miles of trail for use by hikers and bicyclists (the exception being wilderness areas, where bikes are prohibited) Numerous trails throughout the Forest have been identified for mountain bike opportunities

17.142 Most visitors who use roads and trails for motorized recreation do not want them maintained. Adopt a zero-maintenance policy.

The Forest Service is mandated to maintain roads and trails to ensure these travelways are safe and useable by the public, and to provide resource protection

17.143 a quota must be established and enforced, in some areas, on numbers of people and pack animals .

The Forest is establishing area-capacity determinations and allocations, including the monitoring of uses

17.144 *Trails above 10,000 feet should be off-limits to motorized vehicles.*

When assessing whether a trail should be available for motorized use, we consider resource impacts and the capability of the land The Forest is reevaluating trails on the Forest, and the Final will identify which trails are available for motorized users, and those for nonmotorized users only

17.145 Allow ATV travel to the Fremont, Wannamaker, and Christmas camps.

Because this location is to be managed as a special interest area, with emphasis on the historic nature of the sites and on orienteering, use of motorized vehicles here will be restricted

17.146 Capacity management must apply to all users, and be effectively implemented and monitored.

The capacity-determination and -allocation process takes into account outfitter-guide, institutional, and public use throughout the Forest Monitoring of this process is planned to determine if adjustments or other management actions will be needed

17.147 I support/appreciate your actions to keep roads and trails open.

Thanks for your comment Providing opportunities for both motorized and nonmotorized users is a challenge

17.148 Trails 866 and 781 need rest and rotation.

Your comment is noted and will be given to the District to consider for trail maintenance work

17.149 The Cascade Creek and Treasure Creek areas need restoration.

Thanks for your comment We will inform the District

17.150 Better management would allow people to use the Forest for recreation rather than wilderness.

Alternative D allocates a mix of various recreation management prescriptions which offer a variety of recreational opportunities, activities, and use throughout the Forest

17.151 Limit the number of people on the Forest per week.

Thanks for your comment Without implementing a permit system, this would be a difficult task to manage and enforce Refer to Response/Comment 17 62

17.152 With increased people pressure, it takes more FS personnel to operate the Forest.

We do not disagree with your statement, but given the reality of our budgets over the next several years, we will not have the opportunity to increase our staffing Education, interpretive information, and brochures will be used to inform visitors and make them aware of their responsibilities, including good land-use ethics

17.153 I do not believe the problems of unauthorized motorized upgrades and enforcement of closures are being addressed.

Enforcement of our travel restrictions and road-closure policies is important to the management of the Forest, and we do our best to enforce them We also realize we do not catch all the violations on the Forest We do receive assistance from people who report these violations, so we are able to do follow-up work

Trails designated for motorized use are upgraded to meet standards for motorized vehicles, as well as for safety and resource protection

17 154 I am opposed to the Forest Service policy of opening and closing trails to motorized vehicles. Any work on these trails requires public notice and environmental assessments.

The Forest's travel management plan and direction have established which trails are available to motorized and nonmotorized users This is being addressed in our Forest Plan revision, and trails will be identified for use by motorized and nonmotorized users

When Districts reconstruct trails to meet established standards for motorized traffic (motorcycles, ATVs), they are required to do scoping work, and an environmental assessment based on the issues raised during scoping Scoping notification about proposed projects is placed in newspapers throughout the Valley, and sent to people on our various mailing lists

17 155 The public should be allowed to comment on changes of trails.

Scoping and notification of proposed project work by Districts allow interested parties an opportunity to comment Issues that have been identified must be addressed in the environmental assessment, including mitigation measures to be taken to protect resources If the resources cannot be protected, trail upgrades should not occur

If you have not seen the public notices regarding proposed project work, we recommend you write the Forest and Districts and request your name be placed on their mailing lists

17.156 During the second hunting season, roads should be closed

Your concern is noted and will be considered

17.157 If the Forest is closed, it would stop hunting.

Closing of the Forest was not an alternative or option proposed in the draft Forest plan

17.158 We're concerned about hunting and fishing opportunities.

Under the preferred alternative, a variety of recreation management prescriptions are allocated that offer a variety of recreational opportunities, activities, and uses throughout the Forest You will have ample opportunity to hunt and fish on the Forest

17.159 Standards must be in place to insure recreation impacts do not adversely affect the ecological health of the Forest ecosystem The revised Plan must include an up-to-date and comprehensive analysis of recreation impacts, both separately and in concert with other development projects.

The draft Plan contains standards and guidelines (Forestwide and management-area prescriptions) which address impacts from recreation activities The DEIS outlines under the various resource areas the direct and indirect effects of recreation

17 160 **Have an equal distribution of motorized and nonmotorized use on the Forest. a fair and equitable allocation of the remaining non-wilderness areas must be implemented. Manage for motorized and nonmotorized areas. Keep motorized impacts minimal Do not divide trails between motorized and nonmotorized users. Establish nonmotorized areas. Maintain separation of motorized and nonmotorized users.**

Under the preferred alternative, a majority of the unroaded areas were allocated to be managed for backcountry recreation The Forest is reevaluating the trails outside wilderness, and will identify those available for motorized and nonmotorized use in the Final

Forestwide and backcountry management-area prescriptions, standards and guidelines, and travel management restrictions will be implemented to protect the resources and minimize motorized impacts Separate trails for separate users will not be implemented on the Forest Trail users will need to be responsible for sharing trail uses

17.161 It is the responsibility of motorized and nonmotorized users to share trails.

Thank you It could not have been stated any better than this

17 162 At Lobo Point there is conflict between motorized and nonmotorized users, and overcrowding.

Your concern is noted and will be given to the District, to assess and monitor to determine if management actions are needed

17.163 Consider an alternative to Alternative D which allows solitude in the backcountry.

With 524,692 acres allocated to backcountry recreation, there are ample areas on the Forest to find solitude

17 164 Preserve and protect the National Forest from motorized vehicles, including snowmobiles

Travel management restrictions, including Forestwide standards and guidelines, will be implemented to protect National Forest System lands

17.165 Lease the Forest to "snow busters."

Fees for use of the Forest must be authorized by Congress, which has been considering enacting "user fee" legislation for those who recreate on the Forest The Forest has several agreements in place with snowmobile entities to groom and sign numerous roads and trails on the Forest

17.166 What is the reason for management prescription 5 11 in the Hansen Mill/Trujillo Creek area, which should be managed as backcountry nonmotorized?

Under our current Plan, this area is being managed for wildlife habitat purposes, vegetative treatments have occurred here to improve wildlife habitat

In the Draft plan, this area will be managed for a variety of management options, including livestock grazing, wildlife habitat, dispersed-recreation opportunities, exploration of minerals, and timber harvesting The reason for Management-Area

Prescription 5 11 (General Forest and Intermingled Rangelands) is that this area offers us the flexibility to manage it for a variety of uses and resources

17 167 La Garita Creek should be managed as a backcountry nonmotorized area, except south of the ATV trail on Geranimo Creek.

The Forest is reevaluating trails within backcountry areas, to determine which ones will be available to motorized and nonmotorized users These trails will be identified in the Final

17.168 Management of the Pole Creek area allows motorized vehicles The Colorado and Continental Divide Trails are in this area, and it should be nonmotorized.

In our reevaluation of motorized and nonmotorized trails in this area, we will consider your concern

17.169 Eliminate the deception of "nonmotorized"--clearly identify unrestricted snowmobile use in winter as being motorized.

Your concern in noted In the Final, areas will be allocated as backcountry with trails identified as available to motorized and/or nonmotorized users

17.170 I dislike the "motorization" mentality guiding agency policy. Forest resources should not be held hostage to the demands of motorized Forest users. Nor should the Forest consider claims of "historical use" of trails which should be nonmotorized.

The Forest Service is directed to provide a broad range of recreation opportunities, which includes motorized and nonmotorized uses The Forest will comply with this direction, taking into account resource and wildlife protection needs, public input, and management-area objectives Final allocations will have an appropriate mix of motorized and nonmotorized opportunities

17 171 Why would Alternatives B, D, and NA provide the greatest amount of nonmotorized recreation?

The statement on page III--337 is that these alternatives "provide the greatest amount of nonmotorized as well as motorized" opportunities, and visitor displacement would be the least This statement was based on the backcountry management allocations for the purposes of providing either motorized or nonmotorized opportunities

17.172 We take issue with the statement that Alternatives B, D, E, and NA "provide a balanced mix of developed and dispersed opportunities" (pg. III--326), and with the graph on page 2-22. The balance depends on one's values.

You are certainly entitled to disagree

17.173 Locking up backcountry is not the answer to preserving the land.

The Forest is not "locking up" the backcountry from public use These areas are available to the public for a variety of recreation opportunities and uses

17 174 List available snowmobile areas

In the Final, we will discuss the areas snowmobiles currently use, and display them on a map

17 175 Define the terms "snowmobile," "oversnow vehicle," "snow machine "

The definitions are as follows: "snowmobile"--a mechanized vehicle, intended for travel on snow, that is driven by a track or tracks in contact with the snow and steered by skis in contact with the snow. "Oversnow vehicle" and/or "snow machine" refer to the various types of mechanized snow vehicles (snow cats, snowmobiles) which operate on snow

"Snowmobile" will be the only term used in the Final

17.176 What is the explanation for the claim, "currently snowmobile use is primarily tied to groomed trails"? Will snowmobiles be monitored as part of the M&E plan?

This statement is based on the agreements in place with snowmobile entities who groom and sign numerous roads and trails throughout the Forest used by snowmobilers and cross-country skiers Snowmobile use will be monitored as part of our M&E plan

17.177 What is the scientific basis for opening the Forest to snowmobiles?

The Forest Service is directed to provide a broad range of recreation opportunities, including both motorized and nonmotorized uses

The Recreation Opportunity Spectrum is the framework for stratifying recreation settings, activities, and opportunities, and is used as a tool to determine these recreational activities and opportunities, in conjunction with the land's capability, management-area objectives, and desired conditions, in both the summer and winter seasons The ROS framework is based on management needs and research

17.178 Snowmobiles leave only tracks in snow, and do not hurt areas.

Should a restriction on snowmobiles be needed on certain areas or trails, it will be for the purposes of protecting resources, reducing wildlife conflicts, or meeting management-area objectives or safety concerns

17.179 What are other Forests in this Region doing with the snowmobile problem?

Other Forests in the Region generally allow cross-country travel of snowmobiles on snow, but also have areas closed to snowmobile use and areas where snowmobiles are restricted to designated routes

17.180 The negative impacts of snowmobiles are not addressed in the plan.

We will review the literature regarding snowmobile impacts, and address those that are relevant to the Forest in the Final.

17.181 Why are snowmobiles permitted access to winter range?

To access parts of the Forest, you must go through winter range We therefore restricted snowmobiles to designated roads and trails within winter range areas

17.182 Install information signs at snowmobile trailheads regarding harassment of wildlife.

Your recommendation is noted, and we will work with the Division of Wildlife to have this type of information posted at our snowmobile trailheads

17.183 In opening areas to snowmobiles, the safety hazards of mixing cross-country skiing and snowmobiling have not been considered.

Safety is a factor we consider in allowing use and access on the Forest Users have a responsibility to respect others' use of the Forest, in addition to being responsible, safe users themselves and being willing to share trails and areas Signs can be posted at

trailheads informing users of their responsibilities regarding behavior and etiquette when using the Forest

17.184 I support Alternative B with the inclusion of backcountry recreation nonmotorized, with limited winter motorized use and acreage from Alternative D.

Your recommendation is noted

17.185 I suggest a new classification for 4WD trails: 60 inches wide.

This classification would increase the width of trails on the Forest to the same standard width required for roads There are sufficient 4-wheel-drive roads on the Forest for vehicles of this size to use

17.186 Confiscate the property (ATVs/trucks) of people who continually abuse their rights when using the Forest.

Title 16 U S C , section 551 gives the Forest Service the authority to issue penalties and violations to visitors to the National Forest who violate use of vehicles off roads These are restricted to fines, imprisonment, or both The only time we can confiscate property is if it is needed as evidence in a court case

17 187 The idea to rid the Forest of ATVs is excellent.

In the preferred alternative, motorized travel by ATVs, including game retrieval, is generally restricted to roads and trails The Plan does not state we are to rid the Forest of ATV use

17.188 ATVs are not staying on designated routes, few trails are wide enough to accommodate them, and your regulations have opened the Forest to unenforceable conditions

We recognize that during the hunting season there are violations such as ATVs going cross-country to hunt game, not just retrieve it There have been, and will continue to be, both educational and law enforcement efforts to instill in hunters an awareness that the only time ATVs are allowed off Forest roads and trails is to retrieve game

The Forest has identified specific trails as ATV trails, which have been constructed to ATV standards

17.189 Keep ATVs out of riparian areas.

This issue is addressed in the DEIS on page 3--233, under Effects on Water Resources from Recreation

17.190 Closing access would limit the growth of recreation, not increase it.

The Rio Grande NF plans to manage and maintain about 2,200 miles of road and 1,251 miles of trail, which provide ample access to and within the Forest We intend to analyze and close approximately 100 miles of roads which are causing significant resource damage and/or wildlife impacts

17.191 We are opposed to the road-closure program, especially in the Hermit Lake area.

The roads associated with the timber sales in the Hermit Lake area were built for timber management purposes, not general Forest access The construction-and-closure policy related to these roads was part of the timber sale assessment. The decision was to close these roads after the timber sale was completed

17.192 Prohibit use of modified exhaust systems and OHV's with loud engines

There is a prohibition in place regarding the operation of any vehicle which violates any applicable noise-emission standard established by any federal or state agency

17 193 Impose strict penalties for illegal OHV use

The penalties for violations related to off-road-vehicle use are established by 16 U S C , Section 551.

17 194 The travel management policy of "closed unless designated open' does not promote active management by providing adequate recreation opportunities.

The Forest travel management policy restricts motorized travel to designated roads and trails Managing the Forest and providing recreation opportunities are tied to management-area prescriptions and objectives, not travel restrictions

17.195 The proposed closures and restrictions are inconsistent with Forestwide Objectives 4 and 8 (see Chapter Two, Proposed Revised Plan).

The proposed road closures and travel restrictions do not affect the Forest's ability to meet the Forestwide objectives specified in the Plan

17.196 *The proposed closure of roads and trails would be a detriment to the economy in a* depressed area. Closure of existing trails and roads will severely restrict our right to access.

The proposed road closures and road and travel restrictions will not affect visitors' ability to access the Forest, or be detrimental to the Valley's economy Under the preferred alternative, the Forest would manage and maintain some 2,200 miles of roads and 1,251 miles of trails, and offer a wide array of recreational opportunities--which provides access to the Forest and benefits and enhances local economies

17.197 The Forest has identified roads that need closing. Site-specific decisions are to be made by the Districts as the Plan is carried out. How can the road and Forest user be sure that the closure policy will be implemented?

The Forest Plan directs how the Forest is to be managed Project implementation is tied to the Plan direction, and is the responsibility of the Districts Roads identified in the Plan will need to be scoped and an environmental assessment and decision notice written for each of the roads identified for closure

The Forest will monitor these proposed closures as part of the Forest monitoring strategy Forest users can participate in the assessment process and request to be advised of the final decisions and implementation of the road closures

17.198 The Plan should address increased motorized access through dispersion, and increased education/awareness for motorized users to abide by.

The Plan provides for a broad range of recreation opportunities, which includes both motorized and nonmotorized uses Our final allocation will offer opportunities for motorized users to use various trails throughout the Forest

An emphasis item for our recreation program is to expand our interpretive services, stressing proper use of trails, etiquette, and safety tips Implementation of the Plan also includes the signing of trails with regard to appropriate modes of trail uses

17 199 The Plan does not address the financial benefits of motorized use

This is covered in the DEIS in the Social, Financial, and Economic section on pages 380-381 This deals with recreation which includes both developed and dispersed (motorized and nonmotorized) uses

17.200 ATV use by children with no adult supervision is an accident in waiting

State law requires children to be under adult supervision, and parents are responsible for their children when ATVs are used by children. This law is enforced by state law enforcement personnel, with assistance from our law enforcement personnel

17.201 Use of ATVs and snowmobiles should be coordinated with the Colorado Division of Wildlife.

Motorized vehicles which are not licensed (not required to have license plates) must be registered This is required by state law

The management and restrictions of motorized use on National Forest lands fall under federal, not state, jurisdiction The Forest Service does coordinate with the Division of Wildlife regarding travel restrictions needed in wildlife areas on the Forest

17.202 Do not expand recreation road building.

The preferred alternative states that the only road construction that will occur is for timber harvesting, or oil and gas exploration and development No recreation (general-purpose) roads are planned

17 203 What studies does the Forest have showing recreation use will have a low impact on sensitive plants, special-concern plants, and plant communities on the Forest?

The effects recreation might have on plants are addressed in the DEIS on page 3-98

17.204 Studies should be done to determine the impacts recreation, mineral exploration and extraction, and roads have on plants.

This is addressed in the DEIS on pages 3--98-99

17.205 Allowing ATVs on trails impacts hunting and pushes elk and deer out.

Besides motorized traffic, other factors (hunting pressure, length of the hunting season, weather) contribute to the pushing of elk and deer out of an area We are reevaluating motorized and nonmotorized trails throughout the Forest, they will be identified in the Final Use of ATVs in backcountry will be restricted to motorized trails, for game retrieval during hunting season

17.206 Consider recreation impacts on wildlife, and water and soil quality.

Recreation impacts are addressed in the DEIS on pages 3--208, 3--223, and 3--244

17.207 Erosion has been caused by nonguided folks cutting switchbacks.

Interpretive services, which include land-ethic messages at trailheads, visitor contacts, and environmental-education programs, are an important tool used to educate and make visitors aware of proper use of the land when visiting the Forest

17 208 Something needs to be done about overuse in some areas.

As part of the planning process, the Forest is doing a capacity determination and allocation (for outfitter-guide, institutional, and public use) which will be implemented and monitored to determine if adjustments or management actions are needed

17.209 *Consider how recreational activities can negatively impact biological diversity, and* manage use to prevent such impacts.

The DEIS, on pages 2--17-18, outlines how key biodiversity attributes will be addressed to maintain sustainability

17.210 The Forest's evaluation of the impacts of off-road-vehicle use is inadequate, given the increase in ATV use.

Travel management on the Forest restricts all vehicular motorized travel to designated roads and trails, except for limited cross-country travel by ATVs during hunting season for retrieving game, and snowmobile travel on snow in the winter The monitoring strategy requires the monitoring of these activities to determine if resource damage is occurring and management action is needed.

17.211 The DEIS states ORV use "can cause impacts similar to roads" (pg. 2--19), but these impacts are not substantially considered in the analysis or prescriptions

This concern is addressed in the DEIS on page 3-233 The Watershed Conservation Practices Handbook standards and guidelines that address recreation uses and OHVs will be incorporated into the Final, and the impacts will also be addressed in the Consequences section of the Plan

17.212 The Plan fails to describe the criteria to be used for making determinations about closing trails to motorized use (pg. 3--358) or in guidelines (4--26). The Plan fails to indicate whether these decisions apply to snowmobile use.

The criteria used to base the restriction on motorized use in backcountry areas were based upon management-area desired conditions, resource impacts, wildlife conflicts, and existing travel management restrictions These were not included in the DEIS The criteria used to reevaluate the trails (motorized/nonmotorized) within backcountry areas will be included in the final

Criteria used to place restrictions on snowmobile use were based on wildlife conflicts and desired conditions described in the management-area prescriptions The literature is being reviewed to determine if further restrictions may be needed

17.213 *Please explain the comment on DEIS page 2--19, "The interesting exception is* recreation use."

The comment was made in reference to comparing alternatives and their effects on watersheds Those alternatives with the least resource development have the least risk of impacting watersheds

The exception is recreation activities (both developed and dispersed) and where these activities take place As mentioned on page 2-19, with the expected increase in recreation use, impacts are to be monitored and management action taken, if necessary, to prevent adverse impacts

17.214 The Plan does not consider recreation impacts on species viability, TES consequences, sensitive plants, wolf habitat, Research Natural Areas, the heritage program, rangeland, water, timber and fire.

The DEIS addresses recreation impacts on the various resources under each resource section of the Plan, as follows species viability and TES on page 3--127, sensitive plants on page 3--98, RNA's on page 3--282, the heritage resources program on page 3--322, rangeland on page 3--175, water on page 3--233, timber on page 3--165, and fire on page 3--191

17 215 The DEIS mentions user conflicts (page III--363), but the Plan does not fully address the issue.

This issue is addressed in the DEIS in the Recreation section (page 3--337) and the Travel Management section (page 3--363) The Final will address some items in more detail

17.216 The Plan does not address mountain bike impacts or needed mitigation.

The DEIS did not have a section on recreation activities This will be included in the Final

17.217 Although the DEIS includes a "literature cited" section, it is largely impossible to determine which studies were cited for which claims. What studies were used for citation on page 3--127, 3--245 and 3--361

The citation used in the Wildlife section will be included in the Final The comments made in the Soils and Travel Management sections were based on field work (monitoring) and professional judgement

17.218 Have adaptive management which reflects the results of research, to ensure a reduction of recreation-use impacts.

The recreation standards and guidelines, and recreation settings, are based on recreation research and adaptive-management techniques Forestwide Standards and Guidelines, management prescription objectives, and monitoring of recreation activities also incorporate research and adaptive-management practices

17.219 Defer management decisions which cause negative impacts until research is completed and data acquired.

The Plan identifies those areas which require future data and research needs as part of the Forest's monitoring plan Site-specific analyses address issues, data needs, and mitigation measures required to implement project decisions

17 220 Map and show to the public areas experiencing unauthorized motorized use on the Forest

Because our travel management policy restricts motorized travel to designated roads and trails during the summer, the Forest does not have many violations of these restrictions during this time of year Normally the violations occur during hunting season, when hunters travel off roads and trails to hunt, rather than just to retrieve downed game

Each hunting season we discuss this policy with hunters and give them brochures to make them aware of the forest policy regarding use of ATVs These education efforts will continue

17 221 Camping, and grazing of recreational animals, need to be directed away from riparian areas.

The Forestwide guidelines (6 and 7) for dispersed recreation address these concerns, and the needed revisions will be incorporated into the final

17.222 The language "conflicts will be resolved in favor of recreation" should include "after attempts to resolve and mitigate have been pursued."

Because of the recent Diamond Bar decision, the Grazing standard will need to be changed in all wilderness prescriptions

17.223 A hunting policy that encourages the use of ATVs promotes slob hunting, wildlife harassment, and poaching

The opportunity to hunt on the national forest, and to use ATVs to retrieve game during hunting season, does not promote inappropriate hunting or poaching

17.224 There is a perception that increased timber utilization will in some way decrease or limit other uses, such as tourism or recreation.

Timber production can be a benefit or detriment to recreation The management of stands within recreation areas is a tool used to meet recreation and visual-management objectives, as well as to reduce hazards and insect/disease epidemics On the other hand, timber-production areas can displace recreation users while logging activities are occurring

17.225 The Plan fails to include the effects grazing and timber have on recreation.

The DEIS addressed recreation's effects in the Timber section (pg 3--165) and in the Range section (pg 3--175).

17.226 Decrease timber harvest and grazing to preserve recreation opportunities.

One of the purposes of the Forest Plan is to assess various alternatives and discuss the management options (management-area prescriptions) for how the Forest could be managed The preferred alternative contains a mix of management opportunities, including a variety of recreation prescriptions and opportunities

17.227 Analyze the long-term benefits of converting roads to trails in habitat for TES species.

The Rio Grande NF currently does not have a problem with habitat diversity for TES species, nor with roads within these habitats causing significant impacts The Plan does have a Forestwide standard in place for taking the necessary action to protect TES species

17.228 I wish to know the elevations of the peaks around Coney Peak, and suggest you consider having an overlook on Coney Peak.

We recommend you purchase the Finger Mesa, Pole Creek, Red Cloud Peak, and Lake San Cristobal topographic maps, which show the elevations of the peaks around Coney Peak The roads and trails within this area will be maintained, but there are no plans for any other recreation facilities or vista overlooks to be developed in this area

17.229 The backcountry motorized prescription mandates a road and trail density of 1 mile of road/trail per square mile of land. We object to combining road and trail density to form a single density standard.

Your comment is noted and will be considered

17.230 Alternative D allocates 22% of the Forest's budget to recreation and wilderness. Considering the proposed reductions in access and recreation diversity, this money will be wasted.

The preferred alternative allocates a majority of the Forest to be managed for a variety of recreation opportunities and activities, and includes the maintenance of about 2,200 miles of roads and 1,251 miles of trails This alternative reduces neither access (to or within the Forest) nor recreation opportunities The budget reflects what it takes to manage the recreation program on the Forest, and will not be wasted

17.231 The Forest should work with the Gunnison NF to assess water sources and camping locations along the CDNST.

Your proposal is noted and will be given to the Saguache District, to coordinate with the Gunnison NF for assessment and implementation

17.236 ORVs use can cause significant erosion and degradation of trails and roads These impacts can sometimes be partially mitigated if users operate their equipment and use trails properly, and by proper trail construction. Resources to ensure either or both of these appear limited.

We address and mitigate impacts from use of the Forest's roads and trails by implementing travel management restrictions; outlining road and trail objectives and constructing these travelways to standards for the mode of travel appropriate for these routes, assigning and prioritizing maintenance schedules, working with user groups to assist with maintenance, and educating visitors about proper land use

17.237 An adequate monitoring-and-evaluation program must include three components: a scientifically sound method to assess habitats and populations of indicator species, a reasonable frequency of measurements, and a predetermined degree of change which triggers reanalysis of management activities.

The DEIS contains a discussion of current scientific concerns with the MIS approach and why we chose to monitor habitats The monitoring approach has been revised to survey certain species using the "fine filter" approach

17.238 Any management decision that results in negative impacts on the Forest's inhabitants should be deferred until review is completed, necessary data acquired, and a monitoring-and-evaluation program established.

The Plan identifies the areas that need future data and research as part of the Forest monitoring strategy, including monitoring requirements The strategy has been revised to monitor certain species using the "fine filter" approach

17.239 The Visitor Impact Management process (Graete et al., 1990; Kruss et al., 1960; Vaske et al., 1995) is one scheme which synthesizes many concerns into a single management approach

We reviewed these literature citations The concepts (social and scientific information) have been integrated into the Forestwide standards and guidelines, and our monitoring approach has been revised to include the evaluation of both the social and physical aspects of recreation activities

17.240 In the development of its management strategies and decisions during the next planning period, the Plan must consider substantial available scientific information regarding recreation activities.

Forestwide standards and guidelines, the management of recreation settings, and travel management policies are based on the best available scientific information Implementation of the Forest's monitoring of recreation activities will integrate new scientific information as it becomes available

17.241 The Plan must include full citations, for all claims presented in the Plan.

Revisions in the Plan will be made to include literature citations when such references are made

17.242 The Plan must include a commitment, in terms of funding and personnel, to incorporate the results of its monitoring and evaluation programs, and ongoing baseline ecological research, into its strategy for managing recreation activities.

The Monitoring and Evaluation section of the Plan has been revised to include the monitoring of recreation and ORV activities, including personnel and costs to study these programs

17.243 The Plan and its preferred alternative should increase the use of nonmotorized prescriptions in a way that ORV use is prohibited in areas where it is likely to result in negative impacts.

Trails within backcountry areas will be reevaluated, and identified in the Final as to whether they are available for nonmotorized and/or motorized use Travel management restrictions include motorized vehicles (except snowmobiles operating on snow), which are restricted to designated trails

17.244 Nonmotorized areas should include sensitive habitats and vegetation, old growth, alpine areas, degraded rangeland, roadless areas, and areas adjacent to wilderness.

In our reevaluation of motorized trails in backcountry areas, we revised the trail decision criteria They now include wildlife and riparian concerns, soils and steep slopes, alternative routes, private-access problems, wilderness, and other issues (TES plants and animals, maintenance costs, previous decisions)

17.245 Snowmobile activities should be concentrated in appropriate areas.

We reviewed the literature references cited by this respondent in regard to this comment, and found them not relevant to snowmobile activity, nor did they indicate a need to change the Forest's travel management policy

17.246 Use Prescription 1.31 in areas that include sensitive habitats and vegetation, old growth, alpine areas, degraded rangeland, roadless areas, and winter range areas

We have reviewed where snowmobile use is occurring on the Forest, and most of the activity takes place on groomed roads and trails throughout the Forest, with the exception of the Cumbres Pass, Wolf Creek Pass, and Snow Mesa areas There is limited snowmobile activity in the various backcountry areas on the Forest

17.247 A map with proposed prescription 1.31 areas on the Forest is being sent to supplement comments regarding snowmobile use on the Forest.

We received the map you sent, and it will be considered when we review our *snowmobile-use areas on the Forest*

17.248 The Forest cannot consider the proposed ski area expansion until a thorough monitoring-and-evaluation program exists for recreational-use impacts on the Forest, including education on ski resort impacts.

The Forest currently monitors the Wolf Creek ski area per provisions in their annual approved operating plans and terms of their special-use permit

The future development and expansion of the ski area are site-specific projects, and will require the ski area to submit to the Forest a new master development plan which addresses the potential future development and/or no development of the private land, proposed access routes, upgrades of electrical and natural gas lines and other proposed facilities, lift lines, and ski terrain on the Forest

Scoping and an environmental analysis (EIS) of Wolf Creek's new master development plan will be done once the plan is submitted and we know all the aspects of the proposed development and associated impacts

18. Scenic Resources

18 01 **"because trail users yearn foremost for a wilderness experience and because the trail offers such unique scenery and spectacular views, making sure the visual impact of commercial development is kept to a minimum is of great importance to the Colorado Trail Foundation."**

The mapping of Scenic Resources considers the importance of scenic views and our constituents concern for scenery Areas where there is a high concern for scenery are mapped as Sensitivity Level 1 Sensitivity Level 1 areas indicate a high Scenic Class and as a result human-made activities remain visually subordinate to the existing characteristic landscape

18.02 **"A secondary area of interest to the Colorado Trail Foundation is minimizing the visual impact of commercial development along the CT since users of the trail are primarily seeking a wilderness experience."**

The mapping of Scenic Resources considers the importance of scenic views and our constituents concern for scenery Areas where there is a high concern for scenery are mapped as Sensitivity Level 1 Sensitivity Level 1 areas indicate a high Scenic Class and as a result human-made activities remain visually subordinate to the existing characteristic landscape

18.03 **"Point of fact, the part of forest management that calls for nurturing of the human spirit receives far less energy, care, and innovation in the DEIS than any of the other concerns. I see nothing other than 'vista' impacts mentioned in either the statement or the summary."**

"Did your surveys include other visual impacts? The chaotic log-extraction corridors, slash heaps, widespread trail and riparian cattle damage along streams, the deepening scars of random roads rutting up, over and across virtually every park and meadow and trails chewed and widened by the ATV's, not to mention fields of fire rings and camp litter in most unimproved camping areas...and very few signs suggesting, directing or prohibiting anything It's a real downer."

Affects to Scenic Resources for the Forest Plan Revision effort are measured on a forestwide basis The Scenery Management System determines the importance of scenery based upon the Viewer Position and the Sensitivity Level of the road or trail The mapping of Scenic Resources considers the importance of scenic views and our constituents concern for scenery Areas where there is a high concern for scenery are mapped as Sensitivity Level 1 Sensitivity Level 1 areas indicate a high Scenic Class and as a result human-made activities remain visually subordinate to the existing characteristic landscape This includes timber cutting, slash treatment (and all activities associated with timber cutting including road building and skid trails, etc), and all other types of resource management However, riparian damage, random roads, fire rings and camp litter was not considered on a forest

wide basis This is considered during project level analysis Standards and Guidelines will be updated before the Final EIS to cover these issues.

18.04 **"p I-5 - Scenery - Accomplishing, '...visually sensitive ridges will have uniform timber heights and stands of sufficient density,' seems to conflict with maintaining composition and disturbance frequency similar to natural disturbance regimes**

The Scenery Management System allows for natural disturbance regimes The Landscape Character is a combination of physical, biological, and cultural attributes that make landscapes unique Managing Scenic Resources is concerned with human-made impacts that change the Landscape Character that may cause un-natural lines, forms, colors, and textures

18.05 **'The entire chapter in the DEIS (3-340 et seq.) deals only with macro scenic resources: views from 300 feet away to infinity. Not a word is spoken about the micro scenery-the close-up view of the aftermath of over a thousand sheep eating and trail-plowing their way across a previously flower-and grass-covered alpine basin; or the fact of every flat camping place in a steep glacial valley being covered with the residue of cattle lolling; or what remains after a hundred cattle visit the only spring-fed water source for several miles. The following is all the DEIS had to say on the subject of what is so pervasive a conflict of broad reaches of the Forest traversed by trail:**

"Effects on the scenic resources from range management can be either positive or negative Often, grazing occurs in areas of low visual and vegetative diversity. Range structures and grazing animals can provide scenic variety in a monotonous landscape. Adversely, range structures and grazing animals can create negative impacts to the scenic resource through improper location of structures, and grazing patterns. The scenic impacts from grazing are usually small."(3-353).'

Your concerns are noted However, Scenic Resources are addressed on forest wide basis Scenic Resources are considered in the immediate foreground 0-300' in the mapping process at the macro scale Areas of high concern along Sensitivity Level 1 areas such as the Continental Divide National Scenic Trail and the Colorado Trail will be managed so that human made activities remain visually subordinate to the characteristic landscape The minimization of immediate foreground and foreground scenic disturbances is part of project level analysis and there is time allowed for the rehabilitation of disturbed areas

18.06 **'The following unclear direction appears under Scenic Resources: "Assess changes in *scenic condition objectives by measuring the: a. Assessing (sic) scenic condition with* respect to ROS classes through the timber coefficients".'**

You are correct The following statement will be rewritten to make this statement more clear for the Final EIS

18.07 **Many people deplore the effect that logging has on the scenic resources of the forest It is true that for a few years after a timber cut there can be some degradation of the scenic beauty of the area. However, if you compare logging effect on scenic resource to natural or prescribed fire or an insect infestation such as spruce budworm, there is no argument that these types of scenic degradation are much worse If you do not harvest a mature forest eventually it will burn or be wiped out by insects or disease."**

We disagree The Scenery Management System was used because of the publics increasing concern about the effects of human made activities on Forest Service Lands It *is true that the scenic resources will be affected immediately after a timber cut and the* Scenery Management System allows for a period of rehabilitation, however, this does not

apply to long term affects of un-natural lines, form, colors, and textures that past management have left behind The Scenery Management System was set up to help better plan and design timber cuts so that timber activities do not leave long term negative scenic effects on the landscape It is a matter of perspective, however, Scenic Resource management addresses insects, disease, and fire as neither degrading nor beautiful only a change in the Landscape Character by which we will measure human activities on it The Scenery Management System allows for human made activities as well as catastrophic events

18.08 **"I hope your committee considers the impact suffered by other forests inside and outside of Colorado, the particularly fragile soils and dry climate as well as the goal of maintaining the beauty and pristine peaceful environment of the Rio Grande National Forest for generations to come."**

The Rio Grande National Forest is managed for all types of users The Scenery Management System helps protect or minimize the effects of a range of human made activities that may cause a change in the line, form, color, or texture on the Characteristic Landscape.

18.09 **"p II-3 - 2.8-How can this objective be achieved?**

Aspen stands are considered to be a positive attribute on the landscape by providing diversity in color and texture to surrounding viewsheds when managing Scenic Resources

18.10 **Objective 4. Provide for scenic quality and a range of recreation opportunities that respond to our customers and local communities. This objective does not seem to be met in this plan as it replicates the visual "sameness" of vast acres of old-growth forests. While these are attractive, the variety of landscape resulting in healthy and varied structural stages, managed in visually pleasing patterns is of high scenic quality also. The indications in many parts of this plan that a large fire will occur soon in the old-growth acres and burn several thousand acres makes one wonder what the future scenic quality will be for the Rio Grande under this Plan."**

We disagree Scenic resources does not promote "visual sameness", only that areas under specific management activities should blend with the existing landscape character. We agree that landscapes with varied structural stages, managed in visually pleasing patterns is of high scenic quality also The Scenery Management System allows for natural disturbance regimes such as fire, insects and disease They are considered part of the natural processes Scenic Resource management addresses insects, disease, and fire as neither degrading nor beautiful only a change in the Landscape Character by which we will measure human activities on it The Scenery Management System allows for human made activities as well as natural processes

18 11 **'It is ironic that much attention is paid to Scenic Resources, with the DEIS Summary stating, "Recreation and tourism are a main component of Colorado's economy. It is important that activities take place on the National Forest blend with the existing landscape to help enhance visitor's recreation experience." (p.32)**

Put together with the restrictions and prescriptions elsewhere, this means, "Look, but don't touch," to the visitor. This prevailing attitude is hardly an enticement for the visitor to spend money and contribute to the economy.'

We disagree Scenic Resources is an important resource to be managed like any other resource on the Rio Grande National Forest This does not mean "look, but don't touch", rather, human-made activities should be designed with more consideration to the natural appearing landscape or activities should resemble natural patterns

18 12 **"I have fished, hunted, traveled and camped in the Rio Grande National Forest for over 15 years and write you because I am concerned by the continuation of over logging the forest and the long term devastation so caused. I have just returned from the Creede area. Time spent in the Pool Table Mesa area is enough to convince me that the waste remaining after logging over 20 years ago is yet a tragic mess which is repulsive to view, difficult to travel or hunt and which will take many years before it repairs itself. Last year I spent time above Regan Lake. Again, what had been a virgin forest environment is again left beyond repair... unsightly, difficult to travel and almost impossible to hunt "**

The last plan did not adequately address cumulative impacts or long term effects of human-made activities on the Visual Resources Within the new plan, Scenic Resources are considered more carefully using constituent surveys (public input), timber coefficients, and cumulative effects analysis

18.13 **"Much of the RGNF is in a slow timber growth area How much commercial timber can this area actually produce at a sustainable level while at the same time providing habitat for viable wildlife populations and high visual values? Considering these other values and constraints, should there be any large-scale commercial timber harvesting on the Creede District?"**

Timber Coefficients were used to help determine the amount of timber that could be removed while still meeting the Scenic Integrity Objectives Computer Visual Simulations were used to determine which prescriptions met the appropriate Scenic Integrity Objective. Most all of the timber harvesting prescriptions were able to meet each of the Scenic Integrity Objectives depending upon the slope, aspect, and the ability of the landscape to absorb human-made activities These are available to view upon request from the Rio Grande National Forest Supervisors Office in Monte Vista

18.14 **"Much of the discussion of old-growth and landscape characteristics refers to the appearance of the landscape--the scenic qualities--the size of the patches and the texture. If this forest is managing the forest for the visual resource it sold consider its statement in DEIS page 3-26 that notes that the real old-growth stand of ponderosa pine is more often an open forest, no the dense, multi-layered forest people think of for old-growth. It is admirable the RGNF recognizes that people want the forest to look a certain way, but what they want it to look like may not match up with the old growth emphasis the forest is placing on its management in all of these alterative."**

The emphasis of the Scenery Management System is not to determine what the natural characteristics of any ecosystem should look like, rather, ecosystems provide the template for scenic resource management Once those characteristics have been described, human-made activities are designed to fit within this landscape paying close attention to line, form, color, and texture of the design so that it blends within the existing characteristics of any ecosystem

18.15 **"P.S I sure wish the loggers were required to leave areas in better shape! The area of the Toll Road looks totally devastated where they logged this summer."**

Although, there is time allowed for natural rehabilitation of human-made activities (1-2 yrs), past timber sales are a result of the last forest plan and the Visual Resource Objectives attached to that area The last plan did not adequately address cumulative impacts or long term effects of human-made activities on the Visual Resources Within the new plan, Scenic Resources are considered more carefully using constituent surveys (public input), timber coefficients, and cumulative effects analysis

18.18 **"Tourists come to Colorado to enjoy the scenic vistas Alternative E appears more sensitive to aesthetic qualities, preserving more land in "Unaltered" or "Imperceptibly Altered" state than does Alternative D."**

This is true The types of prescriptions in alternative E will limit commodity extraction activities The reduction of human-made activities means that the forest will look more natural appearing.

18.19 **"Rx 4.21, scenic byways· these areas should be unsuitable for timber production. The oil and gas lease stipulation should be NSO for at least one-quarter mile on either side of the main travelway."**

Your concerns are noted Areas along the Scenic byway are not unsuitable They are considered suitable but not scheduled into the Allowable Sale Quantity This allows some management to take place along Scenic Byways but the activities will be limited by the Scenic Integrity Objectives for those sensitivity level 1 areas Sensitivity Level 1, which indicates a high concern for scenery, this means that this area will be managed so that human-made activities blend with the existing landscape character

The oil and gas lease stipulation is a Controlled Surface Use stipulation This requires that all activities meet specific conditions (such as the Scenic Integrity Objectives of High) in order for a site to be occupied

18.21 **"Environmental impacts (such as eroded trails and roads) caused by off-road vehicle use can reduce the aesthetic value of the Forest to other recreational users "**

Your concern is noted, however, the Rio Grande National Forest provides for a wide range of travel opportunities on roads and trails for a variety of user groups Our current travel management policy restricts motorized use to designated roads and trails Any motorized use off of designated roads and trails is illegal (except during hunting season for game retrieval). Some trails are designated for motorized use and some are designated foot and horse only Under the new plan, trails will be clearly identified so that different user groups will be aware of the types of recreational users they may encounter and will help reduce the aesthetic impacts

18.23 **"The use of snowmobiles creates, for many people, visual disturbances (see, for example, Montana 1993). The smell of snowmobile exhaust is highly disruptive and degrades aesthetic qualities for many non-snowmobile users (see, for example, Montana 1993) Snowmobile emissions can also lead to reductions in air quality, which, for many people, are aesthetic degradations in addition to their environmental and health impacts (see, for example, Montana 1993). The noise caused by snowmobile use is for many people highly disruptive and substantially degrades the aesthetic qualities of outdoor recreation (see, for example, Bollinger et al. 1972b; Raedeke and Taber 1983; Montana 1993)."**

We understand your comments, but the literature reviewed does not support all of your points Many of the points reviewed deal with other areas of the Nation and don't seem to pertain to the situations on our Forest The RGNF will continue to provide a wide range of recreational activities for all user groups There is a potential that snowmobile use can reduce solitude for some recreationists, however, there are many areas of the Forest that restrict the use of snowmobiles and motorized vehicles and allow other recreationists solitude

18.24 **"Environmental impacts caused by larger-scale recreational development, such as ski resort expansions, can impair the aesthetic qualities of an area."**

Ski areas can have long-lasting impacts on dedicated areas of the forest The purpose of the Scenery Management System is to manage to reduce the scenic effects to all users as well as providing optimum recreation opportunities The Rio Grande National Forest provides for a wide range of recreation opportunities for all user groups The last plan did *not adequately address cumulative impacts or long term effects of human-made activities* on the Visual Resources Within the new plan, Scenic Resources are considered more carefully using constituent surveys (public input), timber coefficients, and cumulative effects analysis Any future ski area expansions will meet identified Scenic Integrity Objectives for the area.

18.25 **"Larger-scale recreational development, such as ski resort expansions, can directly disturb other recreational users (i e., increased vehicular traffic and increased density of recreational users) and thus reduce the aesthetic value of the Forest to them "**

The Rio Grande National Forest provides (and will continue to provide) a wide range of recreation opportunities across the forest where there is little or no vehicular traffic, a decreased density of recreational users, and no disturbances from noise or fast-moving vehicles

19. Travel Management

19 1 **Individual general comments promoting or requesting one particular type of Forest access over another. Comments either from a motorized or nonmotorized perspective with little tolerance for the opposing point of view. Comments also deal *with the issue of access rights and denial of such.***

The Forest Service is mandated by law to provide a broad range of recreation opportunities which include both motorized and nonmotorized travel The RGNF will comply with this direction taking into account resource and wildlife protection needs, public input, and management objectives Final allocations will provide an appropriate mix of motorized and nonmotorized opportunities on the Forest To minimize impacts to fragile ecosystems, motorized travel will be restricted to those roads and trails suitable for and specifically open to those uses. Cross country travel will only be allowed in certain areas of the Forest on snowmobiles and for retrieval of game on ATV's outside wilderness and designated backcountry areas after 12 00 noon during the fall big game hunting seasons The demand for travel opportunities on the Forest and the number of roads and trails available to provide these uses makes it impossible to dedicate all travelways to specific uses It is not the intent of the RGNF Forest Plan Revision to deny any user group or individual access to any part of the Forest but rather to provide a mix of access/recreation opportunities to all users The type of access allowed in certain areas and on certain trails of the Forest may be limited in an attempt to protect resources, wildlife, and/or establish a range of travel opportunities It is the desire of the RGNF that all users will peacefully co-exist and respect each other's recreational interests

19.2 **Close more roads.**
Additional miles of road should be closed as described in Alternative F
Don't close roads. You cannot deny users access to public lands.
Fully support the closure of 486 miles of roads
You've closed enough roads already.

The Forest intends to analyze and close only those roads that are causing significant resource damage and or wildlife disturbance during the 10 year planning period based upon available funding. Approximately 100 miles of roads have been identified for analysis The NEPA work will be performed on a project by project basis prior to any closure Public input is encouraged and will be accepted at that time Additionally, the

Forest has begun inventorying the estimated 300-500 miles of volunteer 2 track roads and once completed, NEPA work will be done on these roads to determine whether to obliterate, add to the current Forest Development Road System, or convert to trails Additional inventoried roads may be analyzed for closure during the 10 year planning period as 2-track inventories are completed and annual travel management monitoring is conducted The only expected new road construction will be for timber or other resource extraction activities as outlined in the FEIS or for access to private inholdings which the Forest is mandated by law to provide reasonable access to With these possible road closures, the Forest will not nor does it intend to deny access to any user group to any part of the Forest currently accessible by motorized vehicle

19 4 **The damage done by bulldozers and deep chisels closing roads is far more than 75 years of vehicle use. Closing roads does much more damage than leaving them open ever could.**

The initial obliteration of roads may appear to be damaging but is necessary to accomplish the long term objectives of such closures It is done to stop rutting and erosion and to allow moisture to penetrate the soil and seeds to germinate leading to the overall recovery of the roadway The obliterations objectives usually include sedimentation reduction, reduction of wildlife disturbance, eliminating duplicate access to an area, or a variety of other resource protection goals

19 5 **Travel restrictions seem to be aimed at senior citizens and handicapped.**
Shutting the Forest down would hurt our community a lot.
We want to be able to enjoy our Forest.
Please don't shut us out of the Forest.
You do not have the right to deny us access to public lands.
It appears you are closing the Forest to my enjoyment.

It is not the intent of the RGNF Forest Plan Revision to deny any user group or individual access to any part of the Forest but rather to provide an appropriate mix of access/recreation opportunities to all users The type of access allowed in certain areas and on certain travelways may be limited in an attempt to protect resources, wildlife, or establish an equitable mix of opportunities for all

19.6 **Restricting travel on logging roads which were built with taxpayer funds is a misuse of public funds and should not be done.**
All roads constructed for timber harvest should be closed immediately after the harvest is through.
Why can't timber sale roads be minimally constructed, reclaimed immediately after harvest, and the area turned back to wilderness?
We should be allowed to drive on timber sale roads since we the taxpayer paid for them.
Why do you gate and close all the timber sale roads? We should be allowed to hunt and drive on those roads.
Open more roads to gather firewood in the summer. Unlock gates during hunting season to retrieve game.

Timber sale or logging roads are normally constructed for the sole purpose of timber extraction and are normally closed to motorized vehicles as soon as the logging activities are complete or after appropriate time is allowed for firewood gathering These are the only Forest Development Roads on the Forest closed to year round motorized use The restrictions to motorized use are done to allow the roads to "heal" until the next scheduled logging entry and to minimize long term or continual stream sedimentation and wildlife disturbance These roads were not built for pleasure driving, hunting, game retrieval, or any other activity other than timber harvest Firewood gathering is sometimes

allowed to provide access to firewood resources and to reduce fuel loading and fire risk Timber haul roads must be constructed to certain minimum standards that will allow the heavily loaded logging trucks safe, passable access to harvest areas Forest users are generally welcome to hike, bike, horseback, cross country ski on any of these restricted timber sale roads. If additional logging is planned for the same area in the future, roads are normally gated rather than obliterated It is not economically prudent to construct, then obliterate roads each time an entry is made for timber harvest On the other hand, if the road will not be needed for at least 20 years in the future, it is generally more cost and resource effective to obliterate the roads It is not economically feasible to log on the RGNF where there are not existing roads without some road construction The construction of timber sale roads is covered through timber sale contracting procedures Timber purchasers are given "credits" for timber which they then use the money obtained for these logs to build Forest Service approved roads There are infrequent occasions when extenuating circumstances dictate that timber sale roads will be built with appropriated dollars but generally these roads are not paid for with appropriated (taxpayer) funds

19.7 The road into Platoro should be kept open during the business season (May 15-Nov 1). Funds should be set aside for snow plowing

The plowing of the road into Platoro is an issue of private landowner access that should be taken up with Conejos County If the County agrees or a private contractor is hired to do the plowing, a permit would have to be obtained from the RGNF to plow the road The permit would outline the Forest Service's plowing specifications for safety and protection of the resource and investment in the roadway

19.8 Why are ATV's allowed on trails that were not designed for them?
Why don't you convert old roads to ATV trails?
Don't build any more ATV trails.
ATV's should not be allowed on trails. They should be restricted to four wheel drive roads.

In an attempt to provide meaningful recreation for all user groups and accommodate the projected growth in ATV use, the Forest intends to reconstruct some trails to more safely accommodate ATV's Some closed or abandoned 4WD roads may also be converted to ATV designated trails which would still be open to all other non-vehicular uses as well This would all be directly dependent on available funding or partnership/volunteer opportunities The Forest also intends to continue to allow ATV"S on all other motorized trails at their own risk Not permitting them would be denying access to a specific user group based solely on the Forest's opinion that they are or might be unsafe

19.9 Out of state residents should pay a registration fee to operate ATV's on Forest Service roads and trails just like residents have to.

The Forest Service does not control the registration of ATV's in the state of Colorado or any other state ATV fees for residents or non-residents is an issue that should be taken up with the State of Colorado Department of Parks and Outdoor Recreation

19.10 Many roads on the Forest were not put in by the Forest Service, have not been maintained, and have not cost the Forest any funds They are not being heavily used and are a major part of the overall forest visitor experience. These roads will not deteriorate much from year to year and if they do, that is just the cost of doing business to allow both present and future generations access to their forest lands. The Forest needs a better road inventory to properly analyze travel and effects

The Forest acknowledges that there are an estimated 300-500 miles of uninventoried volunteer 2-track roads and old timber sale roads on the Forest that were not planned or

designed but have appeared over time through authorized (prior travel management policy) or unauthorized cross country travel In either case, these roads are considered to be Forest Development Roads according to Forest Service Manual direction Some of these roads may or may not be causing resource damage or be duplicate routes to certain areas The RGNF has begun to update the Forestwide road inventory which will include the currently uninventoried volunteer 2-track roads with the intent of completion within 2 years The advent of Global Positioning System equipment and the expected arrival of updated aerial photos in the spring of 1997 will greatly assist in this endeavor Based upon the updated inventory, the required NEPA work will be conducted for volunteer 2-track and possibly some Forest Development Roads to add to/delete the Forest Development Road Inventory Unnecessary travelways or those creating resource problems will be planned for obliteration A number of the volunteer 2-track roads are expected to be recommended for addition to the Forest Development Road inventory as maintenance level 2 4WD roads

19.12 Various comments providing guidance for how the Forest should close roads.

The methods of road closure of the roads that will be analyzed for potential closure in the FEIS are outlined on page III-359 of the DEIS One method does call for gating or blocking the entrance to the road and letting the remainder of the road heal itself History has shown varying degrees of success of this type of closure This is, however, one of the least expensive methods of closing a road which must be compared with the success rate The opposite method, complete obliteration with regrading and contouring, often proves to be more effective but is very expensive and sometimes is more environmentally damaging than letting the road heal itself The decision of what type of closure method to be used for each road segment will be made during the NEPA process at the District level for each road at the same time the decision will be made as to whether to close the road or not and will be based on the circumstances surrounding each road segment and available funding

19.16 The Forest should adopt a zero maintenance policy on many roads and trails. Roads and trails frequently used would self maintain and those infrequently used would close naturally over time.

In the past, maintenance has not normally been an issue when considering road and trail closures Future budget projections however, may dictate that this become a consideration In most cases, lack of maintenance causes or allows more resource damage than leaving such roads or trails alone. Maintenance is performed on roads and trails for the safety of the user and to protect resources and the investment Roads and trails that are not closed continue to be used and subsequently will not self maintain or naturally close themselves Also, motorized use is projected/expected to increase, Thus increasing the need for continued routine maintenance

19.17 Areas and specific trails scheduled for motorized or nonmotorized use should be designated and clearly shown in the FEIS.
The Forest should clearly show what activities are allowed in certain areas so users can comment on these decisions and also know where they can and cannot go to enjoy or avoid certain uses.
A travel management map should be included in the Forest Plan Revision.

The Travel Management Map included in the FEIS indicates how the Forest intends to manage all types of travel on the Rio Grande National Forest

19 18 Writer cannot understand why the Forest Service uses $30,000 of taxpayer dollars for every mile of new road, only to allow monopolies like Stone Container to go in and cut 400 year old trees down.

Table L-1 of Appendix L shows the transportation system construction and reconstruction cost structure Local and temporary roads construction, which are the roads within the timber sale area used to get the logs from the stump to the nearest main collector road and comprise the majority of new timber sale road construction, are projected to cost approximately $16,000 per mile. Collector road construction costs, which are the 2 lane graveled passenger car roads that "collect" several timber sales and connect the local and temporary roads with the main highways, are projected to cost approximately $50,000 per mile with few, if any, of these planned Looking beyond the controversy of the necessity of timber sales, these roads are critical to getting logs from the stump to the mill and are designed and built to ensure the safe, passable movement of loaded logging trucks

19.19 Writer desires clarification on the miles of new roads to be constructed during the Plan Revision period as there are conflicting numbers in different sections of the DEIS. The plan needs to show exactly where new road construction will take place on the Forest.

Figures 3-36 through 3-40 in the Timber Resources section of the DEIS show the suitable and scheduled timber lands which are where new timber road construction would take place Exact road locations are not established until timber sale NEPA analysis is completed at the project level Therefore, it is impossible to show exact new road locations in the Forest Plan Table 3-91, page III-360 of the DEIS shows the expected new timber harvest road construction figures for decades 1 through 5 The Paragraph preceding this table outlines the projected 17 5 (rounded to 18) miles of new construction for oil and gas exploration/development Combining the new construction totals in Alternative D with the projected 17 5 miles of new oil and gas road construction gives the experienced and full budget totals of 17.5 to 41 5 miles which are shown on page 3-163 in the Ecological Resources section These totals all reflect decade totals The 2 miles of new road construction outlined on page 3-163 of the Timber Resources section is not an accurate figure. Expected new road construction numbers are as outlined above and will only be for timber harvest and possible oil and gas exploration Some minor new construction may also take place on the Forest for private land access but is uncertain at this time. Timber sale road construction and reconstruction figures are based on FORPLAN modeling The exact location of new road construction is impossible to predict at this time Timber sale roads are located and designed as part of the preparation work for each individual timber sale and are not located until that time

19. 20 Why not plan to disperse motorized use to eliminate congestion, overuse, and safety problems.

The Forest will encourage dispersion of motorized use through education, advertising, signage, etc The reality of this issue is that all users desire to use those trails and roads that offer the greatest challenge, best scenery, same destination, or whatever each individual users goal may be A permit or quota system would be a potential solution but would be difficult to manage and enforce and would deny some users access at certain times It is the desire of the RGNF that all users will find a way to peacefully co-exist and learn to tolerate and respect one another

19.21 Writers have comments about a specific area, trail road, etc issue that is not a Forest Plan item. In most cases the comment is about a decision that they did not agree with that has already been implemented on a specific district.

This comment is not an issue relevant to the Forest Plan Revision and should be taken up with the District that manages this specific concern Your letter has been forwarded to the respective District for their review and information

19.22 ATV's should not be allowed off roads and trails to retrieve game during the fall big game hunting seasons ATV's should continue to be allowed to retrieve game off roads and trails during the fall bib game hunting seasons

After extensive review and discussion of the game retrieval policy, the Forest's ATV game retrieval policy for Alternative G of the FEIS will be as follows

ATV game retrieval will be allowed off roads and trails after 12 00 noon during the fall big game hunting seasons in all areas of the Forest except wilderness, designated backcountry, research natural areas, and trails designated as closed to motorized vehicles ATV use and game retrieval will be allowed on any road or trail designated for such use including those trails in backcountry areas designated for motorized use. ATV use and game retrieval will not be allowed on any road or trail specifically designated as nonmotorized on the ground and/or on the Forest Visitor's map

19 23 When travel management decisions are made, keep in mind loop opportunities and motorized trail corridors for east-west and north-south forest travel.

When considering changes in the Forest travel management plan, when road closures are analyzed, and when other changes to the motorized/nonmotorized mix are considered, the Forest will always look at possibilities for motorized loop opportunities and will keep in mind the major motorized east-west and north-south access routes As a result of public input, the Forest has developed a new prescription for areas designated solely as "backcountry" which allow motorized travel on certain designated trails but which still offer the nonmotorized user a backcountry experience This new prescription will replace the backcountry motorized and backcountry nonmotorized areas of the DEIS See prescription 3 3 in the Forest Plan for details

19.24 Open wilderness to snowmobiles.

36 CFR 261 16-A,B,C prohibits the use of motorized equipment in designated wilderness as does the Wilderness Act

19.25 Why are Road 522 (Fern Creek), Road 509 (Seepage Reservoir) and the Kid Peak to Broadacres Roads being closed and what are the management objectives for closing them?

These three roads were not specifically outlined for potential travel restrictions in the DEIS as were none of the 486 miles that were identified for potential restrictions during the 10 year planning period They were made available for public review however The reason for not listing these roads, as stated in the DEIS, was because the NEPA required for each segment was and is planned to be done at the District Ranger level at which time management objectives for each segment would be outlined and comments such as these would be appropriate For every comment against travel restrictions, the Forest received nearly an equal number of comments in favor of the 486 miles of potential restrictions with many suggesting more The FEIS will show approximately 100 miles of roads the Forest has identified to carry through with the analysis for potential travel restrictions The NEPA work is still scheduled for the District level on a project by project basis There likely will be additional restrictions identified and analyzed as inventories are updated and decisions are made whether or not to add volunteer 2-track roads to the Forest Development Road system or obliterate them

19.26 No roads in roadless areas. No new roads!

New road construction on the Forest will be limited to timber harvest, oil and gas exploration, and special use access to private inholdings which the Forest is required by law to provide reasonable access to Road building in unroaded areas should be expected

but only in a few areas and will be outlined in the FEIS Current timber prices, NEPA costs, and budgets will dictate the economic feasibility of entering unroaded areas Some new road construction can be expected in undeveloped roaded areas to access timber stands not yet harvested New roads for oil and gas exploration and development will depend on the interest and demand for those products but based upon history and predictions is not expected to exceed 18 miles during the 10 year planning period.

19.27 What is the justification for allowing ATV's, OHV's, and motorized travel on voluntary 2-track roads and won't that encourage further development of such roads? Volunteer 2-track roads should be closed until an inventory and NEPA work is completed.

History has shown that nearly any closure other than physically obliterating the roadway does little or nothing more than cause new roads to be developed adjacent to the one that was closed By letting people drive them, it reduces the number of new roads that develop The Forest intends to update and complete the inventory of the volunteer 2-tracks and conduct the required NEPA analysis to either obliterate them or add them to the Forest Development Road or trail inventory during this planning period Those added to the Forest Development Road inventory would become maintenance level II four wheel drive roads and be maintained accordingly

19.28 Writer prefers Backcountry Nonmotorized prescription to be used over the Forest. FEIS should include a year round backcountry nonmotorized prescription to prevent conflicts between motorized and nonmotorized recreationists on the Forest.

The Forest has decided to apply a Backcountry prescription (See Prescription 3 3) to those areas previously designated as Backcountry Motorized and Backcountry Nonmotorized in the DEIS As the prescription indicates, this allows for a backcountry experience in these areas but also allows for some specific trails to be managed for motorized travel (See Travel Management Map) thus allowing both motorized and nonmotorized enthusiasts to enjoy these areas *No mix of motorized vs nonmotorized prescriptions will eliminate* conflicts as conflicts are just as viable within the motorized and nonmotorized communities as they are between these two major groups It is the desire of the RGNF that all users will find a way to peacefully co-exist and learn to tolerate and respect one another

19.29 A locked gate caused writer to have to drag an elk 2 miles while a cowboy with a key was able to look for cattle beyond the gate.

Timber sale roads are normally gated and locked year round following harvest and firewood gathering to minimize wildlife disturbance and resource damage Grazing permittees are normally given keys to those gates that fall within their grazing allotments for the sole purpose of managing their cattle behind such gates

19.30 ATV's are traveling uncontrolled on nonmotorized roads and trails. The Forest Service has been too lenient on enforcement.

The Forest is very concerned about the growing number of travel violations Travel restriction violations are difficult to enforce on nearly 2 million acres of National Forest The Forest has and will continue to seek new ideas and ways to improve our signing, education, and enforcement The Forest encourages law abiding citizens who observe violations to report such to the nearest Forest Service office as soon as possible

19.31 Don't build any more ATV trails.

ATV travel is a legitimate use of National Forest lands The use and numbers of ATV's is expected to grow in the future In an effort to safely accommodate this growing use, the

Forest intends to reconstruct some trails as funding permits to ATV standards New construction of such trails is not expected except in the case of short sections to connect existing trails or roads to create loop opportunities The Travel map enclosed in the FEIS shows those trails identified for potential reconstruction to ATV standards It is the hope and desire of the Forest that all users will find a way to peacefully co-exist and learn to tolerate and respect one another

19.32 Don't need roads maintained.

Forest roads are required to be maintained to standards appropriate for their intended use The frequency and type of maintenance is a function of the maintenance level of each road with level 3, 4, and 5 roads maintained for passenger car use. The Highway Safety Act applies to these roads and requires higher standards Some maintenance on these roads is accomplished through maintenance agreements with the five counties that encompass the Forest Level 2 high clearance four wheel drive roads are also maintained for their intended use and is normally limited to erosion control and resource protection measures Level 1 restricted travel timber sale roads are inspected for maintenance needs normally every 3 years and maintained as necessary Maintenance frequencies are dictated by budget situations and actual accomplishments depend on available funding from year to year The Forest can currently only maintain approximately 60% of the 1,025 miles of road that need maintenance annually under current funding Road maintenance is performed for resource protection, user safety and travel comfort, and to protect the Forest's investment in its roads Roads that are not maintained have the potential to cause more resource damage through erosion and stream sedimentation than roads that are not maintained to some acceptable level

19.33 Reconstruct Trail #932, West Bear Creek, into an ATV trail.

There are currently no plans to reconstruct trail #932 to an ATV standard This trail is will remain a motorized trail that may be traveled by ATV at the drivers own risk in accordance with Forest travel regulations This is a topic that may be best taken up with the Divide Ranger District which manages that trail

19 35 The Forest is not meeting the needs of the local public and economies in the area of providing wood products and driving for pleasure.

The Forest is attempting to meet the wood product needs of the local residents and economies while protecting the sustainability, aesthetics, diversity, wildlife habitat, and health of the Forest ecosystems An increase in driving for pleasure does not mean the Forest is obligated to provide a road or trail to every area There are currently very few areas of the Forest outside wilderness that an individual cannot access on a road or trail

19.36 No uninventoried 2-tracks should be included as new Forest Development Roads Close as many of the estimated 300-500 miles of volunteer 2-track roads as possible. How can cumulative effects be analyzed without accurate road and trail inventories? No decisions should be made until accurate road inventories are completed.

The Forest has begun the process of inventorying and mapping the estimated 300-500 miles of currently uninventoried volunteer 2-track roads An updated trail inventory has been completed Once the road inventory is completed, the Forest will begin the NEPA process of determining whether to obliterate or add any of the volunteer 2-track roads to the Forest Development road inventory There are a significant number of these roads that are not known to be causing any resource or other damage These are candidates for Level 2 high clearance vehicle roads that will likely be added to the Forest road inventory Some may be converted to and managed/maintained as motorized trails Those which are determined to be causing resource damage, wildlife disturbance, etc , likely will be recommended for obliteration The miles of each are unknown at this time An equal

number of Forest users would like to see these roads become long term Forest Development Roads and not obliterated The Forest will consider both viewpoints when making final decisions during the NEPA process at a later date The Forest disagrees with the statement that proper analysis cannot be completed until an accurate road inventory is done Although we do not know exactly how many miles of volunteer 2-track road are on the Forest, we are fully aware of the effects of these types of roads and are going forward with the best information we have at this time utilizing estimates in some cases for certain analysis

19 37 The Forest's trail inventory accounting system must include the miles of wilderness trails in the total nonmotorized trail inventory.

Table 3-90 on page III-357 of the DEIS does show and include the wilderness trail miles in the nonmotorized trail miles total. The Forest has updated the trail inventory for the FEIS and will chart the trail system accordingly

19.38 There is conflicting information about motorized travel in the 1.2 prescription in the Draft Plan. What exactly does prescription 1.2 allow with respect to motorized vehicle use?

The Category 1 prescription chart on page IV-2 of the Draft Plan is incorrect in that motorized recreation in prescription 1 2, Recommended for Wilderness, will not be allowed The only motorized use that may be allowed in prescription 1 2 is for mechanized trail and range improvement maintenance This type of work can normally be done with fewer impacts, in less time, with less disturbance to users, and with significantly fewer funds than by hand Motorized equipment does not necessarily mean but can include ATV's and trail machines. Chain saws and other motorized hand tools are considered motorized equipment as well There are no lands allocated to this prescription in the Final Selected Alternative G

19.39 What exactly do prescriptions 1.31 and 1.32 allow with respect to motorized vehicle use?

The only motorized vehicle use allowed in either prescription 1 31 or 1.32 is snowmobiles in 1.32 and motorized equipment for trail and range improvement maintenance in both prescriptions This type of maintenance work can normally be done with fewer impacts, in less time, with less disturbance to users, and with significantly fewer funds than by hand Motorized equipment does not necessarily mean but can include ATV's and trail machines Chain saws and other motorized hand tools are considered motorized equipment as well. There are no lands allocated to this prescription in the Final Selected Alternative G

19.40 What criteria will be used for closing trails to motorized use and will it apply to snowmobiles as well?

The criteria usually used when making trail management decisions include but are not limited to duplication, erosion and/or other resource damage, little or no usage, safety, right of way conflicts, and in some cases wildlife considerations These criteria are normally not used for snowmobile closure decisions except in the case of wildlife disturbance

19.41 Burro and Bennett Creek Trails should remain motorized.

The Burro and Bennett Creek Trails are scheduled to remain motorized in the Final Selected Alternative

19.42 A nice highway through much of the backcountry would be a benefit to many and would allow many to enjoy the beauty of the land.

The cost of such a highway would be well above the entire Forest budget and would be argued that such a project would not benefit many but rather would destroy pristine areas, damage natural resources, disturb wildlife, etc Most roads on the Forest that have been constructed were done so for timber or other resource extraction and were paid for in most cases with associated receipts The Forest has no plans to conduct activities in the future that would require such a highway The backcountry on the Forest is and will remain very accessible by a variety of means some of which will include ATV's and motorcycles on certain designated trails The Forest Highway Program is the mechanism for providing and improving existing designated roads for the purpose you have indicated However, there are no projected additions or improvements to Forest Highways at this time

19.43 The Forest Service should close a mile of road for every mile constructed. If the Forest Service does not have enough law enforcement to enforce timber sales and illegal traffic they should not let such contracts or vehicles on the Forest. The law enforcement should come first.

Road closures are and will continue to be done on a case by case basis as funds are available and as roads are determined to be causing damage or warranting closure There are no policies, standards, or guidelines that call for closing a mile of road when a mile of new road is constructed However, if the NEPA process dictates and with current new road projections, this situation may occur during this planning period The Forest agrees that we need more law enforcement officers The Forest is enforcing the laws and regulations to the best of our ability To shut the Forest down because of a few violators or in anticipation of violations would not be fair to the law abiding majority

19.44 Page 18 of the DEIS Summary and on page 3-147 of the DEIS mentions 2 miles of new roads in roadless areas in Alternatives B and NA but omits figures for other alternatives.

The 2 miles of new road in roadless areas mentioned on page 18 of the DEIS Summary and on page 3-147 of the DEIS is not accurate Under experienced budget levels there may be minimal new timber road construction into roadless areas depending on budgets, timber prices, and NEPA costs at the time sales are planned. Table 3-91 on page on page III-360 of the DEIS shows the miles of new roads expected under experienced and full budget levels for the next five decades This table will remain and be updated in the FEIS

19.45 Do not expand the trail system to disperse use There should be no expansion of roads or trails.

There is no major expansion of the trail system planned in any alternative Some construction may take place to create loop opportunities, improve accessibility, or improve trail locations or safety concerns Some trail reconstruction will be done to better accommodate expected use The Forest encourages dispersion to minimize user conflicts Minimal new road construction is planned (See table 3-91, page III-360 of the DEIS) and road obliteration of approximately 100 miles may take place pending NEPA work on those roads identified for potential closure The planned inventory of the currently uninventoried miles of volunteer 2-track roads may result in an increase to the Forest Development Road inventory following NEPA decisions on these roads

19 46 It appears the Forest Service has no way to enforce roadless prescriptions outside wilderness. Off road vehicle users have upgraded foot trails to motorized trails. What will the Forest Service do to stop this activity?

We disagree that the Forest Service has no way to enforce roadless prescriptions outside wilderness Enforcement of travel management rules is a continual process The current Forest policy with respect to motorized use is that motorized travel is allowed on any trail outside wilderness and not specifically designated as nonmotorized on the Forest Visitor's Map and/or on the ground This general travel management direction will continue with the Forest Plan Revision Additional trails will be designated as nonmotorized especially in designated backcountry The ATV game retrieval policy will remain as is with the exception of no off road or trail retrieval being allowed in designated backcountry or on nonmotorized trails Enforcement of travel management rules will continue to be emphasized

19.47 Does the public realize the implications of the "closed unless posted open" travel management policy on the RGNF?

The "closed unless posted open" policy is the current general travel management policy on the Forest that the public is fully aware of and will remain the Forest policy in the FEIS with only minor changes

19 48 The Forest Service should consider an alternative that relies on existing roads only. Road construction is the most ecologically damaging and economically expensive aspect of Forest Service management.

The range of new road construction in the first five decades of the revised plan, as shown and described in Table 3-91, on page III-360 and the preceding paragraph on that page of the DEIS is expected to be between 0 and 90 miles and between 0 and 111 miles with both totals being dependent upon the amount of oil and gas exploration and budget allocations Under experienced budget levels, new construction is expected to be minimal through the first five decades as shown in the charts Timber harvests are planned for roaded and undeveloped areas and certain potential unroaded areas The current price of timber makes new road construction economically feasible Future timber values, NEPA costs, and budgets will determine the economic viability of timber sales and associated roads Oil and gas exploration is unpredictable but is not expected to exceed 18 miles in any decade Even at an unexpected high end construction rate of 90 miles (using an average width of 24 feet), there would be approximately 262 acres or 01% of the total Forest acreage disturbed with new road construction This is not meant to minimize the effects of road building but to show a comparison to the overall acreage The Forest is continually striving to minimize and mitigate the effects of road building through Forest Plan Standards and Guidelines which include the use of temporary roads, buffer strips, minimal clearing, better location, etc , but the bottom line is that accomplishing a multiple use management mission without some road construction would be very difficult if not impossible

19.49 Writer comments on the long term maintenance costs of closed/gated timber sale roads being $300-$500 per mile and that the Forest Service could save $5 million in annual maintenance cost by obliterating such roads.

The Forest attempts to inspect closed/gated timber sale roads every 3 years The cost to do such is far below $300-$500 per mile There are occasional problems discovered during these inspections that do require repair and involve additional cost The majority of these roads are left alone to "heal" until the next logging entry is planned If additional logging is not planned, normally within 20 years as a rule of thumb, these roads will be obliterated or rendered impassable It is not economically practical to obliterate roads and then totally reconstruct them for future timber sales

19.50 We would like to see reclamation of all illegally motorized trails included in the plan.

Current travel management allows motorized travel on all Forest trails outside wilderness and on those not specifically marked on the ground or on the Forest Visitor Map as nonmotorized The current ATV game retrieval policy allows for motorized travel anywhere on the Forest outside wilderness We do not agree or believe that there are trails becoming "illegally motorized" We agree that violations of the travel management policy occur and are doing our best to enforce policies and minimize this activity Maintenance and reclamation take place on Forest trails on a regular basis and any damage done by illegal motorized travel is corrected at that time The Forest Plan Revision FEIS will outline the new "mix" of trails for each type of travel

19 51 **Primitive roads should be rated for their 4WD difficulty. 4WD roads should not be maintained or plowed.**

The rating of 4WD roads for various difficulty levels is currently done for certain roads by various Off Road and 4 Wheel Drive Clubs The Forest does not and does not intend to provide input to these ratings due to their subjectivity As for plowing and maintaining primitive 4WD roads, the Forest does not plow these roads and only maintains them on a 3-5 year rotation Maintenance is limited to drainage work(waterbars and drain dips) to minimize rutting, erosion, and sediment movement Roads that have become severely rutted or extremely rough will sometimes be smoothed up for user safety

20. Social, Financial and Economic Element

20.1 **Shouldn't changes in motorized access cause the financial and economic benefits also to change?**

The amount of motorized recreation and its subsequent economic effects does change by alternative The amount of motorized recreation and the type of recreation (camping, sightseeing, etc) are accounted for in each alternative

In Chapter 3 of the FEIS, there is a discussion of Developed and Dispersed Recreation which includes the relative differences between alternatives In the Economics section of Chapter 3, FEIS, there are several tables which show the economic impacts of recreation for each alternative.

20.2 **Is the mix between commodity and amenity uses appropriate?**

In the comment process people gave us their views on which alternative they preferred, or facets of the Forest's management they had concerns about A review of the comments shows that people have very diverse and even polarized opinions and values concerning the mix of goods and services provided by the Forest

With the public's help, each alternative was designed to provide a different mix of uses, consumable and nonconsumable, for the American public We believe the mix amongst the alternatives is appropriate

20.3 **Why isn't there a discussion about impacts on particular communities?**

We first looked at the available social and economic information for the counties in the San Luis Valley We quickly realized that people live, work, play, and spend their money all over the Valley, as well as outside it

The Valley's economy is interconnected, thus making a discussion about any one part of the Valley very difficult We have tried to describe impacts on various counties, but there just isn't good enough information to predict economic consequences for individual towns and communities

20.4 Should timber harvesting be done only when it is financially profitable?

The Forest's intends to have a profitable timber harvesting program We have developed the alternatives so that the program is financially profitable.

There are no laws which require us to have a financially profitable/above-cost program Economically there are many costs and benefits of timber harvesting which are difficult to value in strictly monetary terms

For example, not only does timber harvesting help provide the nation with various wood products, it also can also be used to improve the health of the forest, or to improve the habitat for various plants or animals

Some timber sales may be below-cost if their primary purpose is to improve habitat or forest health (such as by removing the damage done by insect or disease epidemic) However, the ability of the Forest to put together below-cost timber sales is very dependent on extra Congressional funding and ecological conditions

20.5 Isn't it the Forest Service's job to provide for the economic sustainability of the area? (This would include maintaining jobs dependent on Forest resources.)

Congress has given the following mandates to the Forest Service protect the long-term productivity of the soil (National Forest Management Act, 1976), provide clean water (*Clean Water Act*), *maintain the diversity of plant and animal communities, and provide* multiple benefits for people within the capabilities of the land (Multiple-Use Sustained Yield Act, 1960)

Opinions on what is, and how to achieve, economic growth, stability, and sustainability vary throughout the Valley and the state Ideas on the Forest Service's role in these areas also vary We try to do the most we can with the ecological and financial resources available to us

The EIS and Plan were designed to show the difference in economic impacts based on funding(see EIS, chapter 3 Social, Financial and Economic Element) This is a new approach in EIS's The Forest's budget has decreased 30% and the number of Forest employees has decreased 25% over the past few years, and this trend will continue

Decreased budgets result in fewer goods and services for the public We have acknowledged these economic effects in the DEIS, but we cannot make them disappear We regret any loss of jobs in the Valley because of the changes in our budget Only by increasing our budget, which the Forest has no control over, will some of these impacts go away

The Forest is actively seeking partnerships, grants, and cooperative agreements from all sources to improve the economy of the Valley and extend the benefits of our resources

20.6 Are firewood revenues reflected in the financial and economic impacts?

Yes We made firewood-sales estimates for each alternative and included these revenues in our analysis Firewood amounts, by alternative, are shown in a table on page 3-165 of the DEIS

20.7 Isn't firefighting more costly when we don't harvest trees killed by insects, diseases, etc.?

The costs of fighting forest and grassland fires are very high The millions of dollars spent each year fighting wildland fires attest to this fact

The risk or probability of having wildland fires varies considerably throughout the nation and in Colorado The Rio Grande National Forest has had very few fires and is at low risk for future fires, due primarily to the moisture brought by high snowpacks, and summer afternoon convectional storms

About 40% of our forested lands are suitable for timber harvesting In the alternatives, we identify different amounts of the suitable land for timber purposes Because of the snow and rain patterns and history in this area, there is little risk of fires causing much damage

The other part of this discussion is the cost of timber harvesting Much of the forest is unroaded (36%) To harvest timber in these unroaded areas would mean the construction of many miles of road This would be incredibly expensive, let alone maintaining all those roads year after year The costs of harvesting much of these unroaded lands, therefore, far exceeds the possible revenues of the timber

In summary, the risks and costs of firefighting are less than those of building roads and spending years of energy and money on studies, appeals, and subsequent litigation

20.8 Aren't there more economic costs and benefits of the livestock, timber, and tourism/recreation industry than those discussed and shown in the DEIS?

We did not include the total economic or financial contributions of these three industries to the Valley's economy in our DEIS We tried to show only the amount contributed by activities on our Forest When we take into consideration all the grazing, recreation, and lumber goods and services coming from or being produced in the Valley (state, private, and federal lands), the economic benefits are very high

In the FEIS we will change the economic-impact analysis We will show the total economic contribution of each of these industries in the Valley, and then show the Forest's portion of the contribution for each industry at both budget levels. We hope that approach will put things into better perspective

We will also show the costs, benefits, and revenues of each program, and the role they each play in the economic and financial efficiency of the Forest The reader will be able to tell the Revenue/Cost, Benefit/Cost and PNV values for each program

20.9 What model did you use for economic-impact analysis? What were your assumptions?

Economic impacts in the DEIS were estimated using the Micro IMPLAN model with the 1991 data sets a microcomputer program which constructs regional input-output accounts and models, IMPLAN is released, maintained, and upgraded by the Minnesota IMPLAN Group, Inc

IMPLAN is used by economists throughout the U S working for state, private, and federal groups. Input-output analysis is well accepted and reviewed as a method to perform regional economic-impact analysis

a model can be constructed for any region in the United States using companion data available by state and county, with the county being the smallest unit of measure The six counties of the San Luis Valley were joined together as the IMPLAN model region Outputs from the DEIS were used to perform the analysis

Appendix M of the DEIS (Appendix L of the FEIS) contains a complete description of the analysis process and modeling assumptions The FEIS will use the most current data sets The FEIS will also have an appendix describing the analysis process

20.10 There seems to be a lot of population growth in the Valley. Is the discussion about population numbers and trends in the DEIS correct? What difference do these make in the Forest Plan?

Many citizens commented on the population numbers in the DEIS We obtained most of our information from U S Census publications from the last five decades

We will update the FEIS with the latest information from the U S Census Bureau and Colorado's Department of Labor and Employment and the Division of Local Government

Population data are used in a couple of different ways First, they help us predict demand for various services This, in turn, helps us predict which and how much of different services we need to plan for Second, population numbers help show the amount or location of use This is helpful when looking at effects on plants and animals

20.11 Are the Timber allowable sale quantities (ASQ) sustainable?

The Forest has done a lot of work to determine the ASQ We have inventoried one-third of the forest, which gave us accurate measurements of trees in each cover type We have also updated our databases and maps so that we have the best information possible to make predictions and decisions

We have used the best techniques possible to determine the growth and volume of forested stands throughout the forest From this work we have over 30 different sets (strata) of volumes

We have studied the forest to determine where we shouldn't do timber harvesting because of environmental concerns, and have determined that timber harvesting will be allowed on only 40% of the Forest

With the above information, we then developed each of the alternatives These alternatives allocate different parts and amounts of the forest for various uses, including timber harvesting With the allocation information, we then did all the necessary calculations and modeling to make sure the volumes were really there and were sustainable, and that the costs and revenues were as accurate as possible

The public comments on the DEIS show that people have very diverse and divergent ideas about the appropriate ASQ for our Forest, they range from 0 to 50+mmbf

We believe that the ASQ numbers for each alternative are sustainable The amount we actually sell will be determined by the amount of land which allows harvesting, and the budget given to us by Congress

20.12 The Forest doesn't pay property taxes, but it does return 25% of revenues to counties for roads and schools. Shouldn't timber harvesting and anything else that generates revenues be increased as much as possible to help the counties?

The Forest Service does return 25% of all receipts to the counties, for the funding of roads and schools

While the government doesn't actually pay property taxes, counties also receive payments from the federal government based on the acreage of certain federally owned land within each county These payments are know as Payment in Lieu of Taxes, or PILT payments (31 U S A Chapter 69) PILT is paid directly to the counties by the Bureau of Land Management (BLM)

There are no restrictions on how the counties spend these funds. The PILT payments are calculated using a formula which considers the amount of land in federal ownership, the population of a county, and a portion of 25% funds received by the county

If the Forest were to increase revenue-generating activities, the counties would receive an increased amount of 25% Payments At the same time, each county's PILT payment would be decreased by a factor of the 25% payment For six of the ten counties affected by the Rio Grande National Forest, the total payment from the 25% fund and PILT would remain the same For four of the counties, total payments would increase (Hinsdale, Mineral, Saguache, and San Juan)

If the Forest were to decrease revenue-generating activities, each county would still receive its full PILT payment This means payments for six of the counties would stay the same and payments to four counties would be reduced to the PILT payment

The economic element of DEIS Chapter 3 has a complete discussion of the 25% fund and PILT payments, and their effects on the counties

20.13 Can the Forest increase revenues by charging fees to other forest users (i e , hunters, hikers, rock climbers, snowmobilers, skiers?)

The Forest Service, as well as other natural resource agencies, has looked into various possibilities for users fees With declining federal budgets and the increasing need to balance the federal budget, as well as pay off the deficit, we have investigated ways to make us more self-sufficient

Some have suggested a user permit similar to the state-parks permit With payment of a flat fee and a sticker in the window, people could use any Forest Like the state system, using overnight campgrounds would be an additional charge To date, the momentum to make this work is insufficient

One possibility is to use the Sikes Act, which allows the Forest Service, with the consent of the State, to add a fee to hunter permits This money would then be used for funding wildlife habitat improvements The Sikes Act is used in New Mexico, but not in Colorado

Most people consider their income taxes as more than enough payment to use public lands Unfortunately, the country's demand for federal goods and services is greater than its payment for those same goods and services That is one reason for the federal government debt

While we have no plans to start charging user fees, we certainly will consider it when our agency is given the opportunity

20.14 We'd like to see more of the budget go to other areas, i.e., timber, wildlife, etc. Can you change the budget amounts to each program?

Budget and revenue projections are discussed in the DEIS, Chapter 3, pages 371-374 For the "Full" budget amounts, each program was determined separately, based on the theme of each alternative This means the Full budget represents the maximum amount needed by each program area for the alternative

For the "Experienced" budget amounts, we first determined the historic mix The historic mix represents Congress's allocation of dollars to the various programs The historic mix was applied to Alternative NA Based on the theme of the other alternatives, the percentage of the budget allocated to each program was changed. These mixes are only estimates, and were used to analyze the outputs and impacts of the two budget levels We could change the mix between programs even more, but based on Congress's allocation history, we feel the mix is appropriate.

Outputs based on Full and Experienced budgets are discussed in each program section of the DEIS and summarized in the Supplemental Tables at the end of the document The above sections will be updated and contained in the FEIS

The EIS and Plan address the budget because of its impacts on outputs, goods, and services The Forest used these numbers for estimates and analysis only If the public or any group wants the Forest Service's funding to change, those people or groups should communicate their desires to Congress It is through Congressional appropriations that change is made

20.15 How were economic values determined for nonmarket and market resources, and how were they used in the analysis? How about your financial costs?

Non-market valued resources are goods and services not generally traded in the marketplace , but valued in terms of what reasonable people would be willing to pay for them, rather than go without Those obtaining the outputs don't necessarily pay what they would be willing to pay for them For various reasons these outputs are provided for less than full market value

There are numerous methodology for establishing surrogate market values for these non-market goods and services Commonly used methods include the travel-cost and contingent value approaches The non-market values used in the economic analysis of alternatives, were established through research conducted for the Forest Service 1990 Resource Planning Act (RPA) National Program Assessment, updated for the 1995 RPA program Science teams from the Rocky Mountain Forest and Range Experiment Station were primarily responsible for conducting the non-market valuation research

The values used in the RPA analysis are intended to represent estimated market prices for resource outputs for each Forest Service Region As such, the established market value represents a single value estimate at a demand-supply equilibrium point, and not a total willingness to pay Outputs included in the economic analysis that have non-market values include recreation, hunting, fishing, and wildlife use. (FEIS, Appendix M, pg M-17)

Market resources, in contrast to non-market resources, are resources whose values are established through or estimated from actual market transactions Timber is a good example of this type of resource The value of timber is established through the competitive bidding process and represents the market price for stumpage The stumpage value for Rio Grande NF timber was established by averaging the actual prices paid for the NF's timber for the period 1993 through 1995 Examples of other market resources include grazing and minerals.

Both market and non-market values at market-clearing levels were used in the present net value (PNV) analysis PNV was the primary criterion used to measure the economic worth of alternatives For each alternative, PNV was the difference between the discounted value of all priced outputs (both market and non-market) and the discounted cost of Forest Service management and investments over the analysis period PNV converts all costs and benefits over the 50-year planning period to a common point in time The PNV for each alternative can be compared directly, even though the actual costs and benefits occur at different times among alternatives

Our financial costs come directly from our accounting databases In many cases we tracked costs over several years, adjusted for inflation, and then calculated averages so that we could identify various trends

Each program has costs in operations, maintenance, investments, overhead, and monitoring The costs of our timber program are broken down even further, into administration, sale preparation, analysis and documentation, support, planning,

inventory, reforestation, engineering, and road building All these costs and their relationships are in Appendix L (FEIS) - Analysis Processes

20.16 Can you, and if so, how are you analyzing the economic benefits of a healthy ecosystem?

We are attempting to capture these benefits in the overall analysis of the alternatives The indicators of ecosystem health are generally described in qualitative, non-market terms, and their importance are expressed as overarching management goals that provide the framework for management These environmental goals and values are given full consideration along with economic and technical considerations in the selection of the preferred management alternative This is, in essence, the recognition, of broader aspects of resource allocation

The economic analysis, as it stands now, reflects the level of valued goods and services expected to be produced by each alternative The Forest Plan analysis supports the conclusion that these levels of goods and services are sustainable, are derived from ecosystems that are healthy, and are being managed in a manner that assures their sustainability

20.17 How do you decide when to harvest trees?

The Forest Service bases the decision to harvest trees first on biological conditions, then on economic conditions

In even-aged stands, the Forest Service can cut trees anytime after the stand reaches culmination of mean annual increment (36 CFR II 219 16(a)(2)(iii)) Mean annual increment (MAI) is the total cubic volume per acre divided by the age of the stand Culmination of MAI is the age when MAI reaches its maximum value

While MAI is a biologically based definition, it is the same as the average physical product (APP), which is found in production-economics literature

For uneven-aged stands, there is no statutory guidance for when trees are cut Each stand is studied for various conditions and cutting is based on species composition, diameter distribution within the stand, basal area, and silvics

Once an even- or uneven-aged stand has reached certain biological conditions, then the economics of harvesting the stand are considered Included in this study are the volume available, the predicted revenues, and the costs of roads, administration, etc

20.18 We think the Forest should be harvesting more timber. Is there any way the Forest can show higher volumes and what happens when more timber is harvested?

In the DEIS, the alternatives varied the amount of tentatively suitable timber lands available for harvesting from 0--81% This variation was based on the differences in management-area allocation While we also show the volume effects of different budget levels in the DEIS, for the FEIS we will be showing several new aspects of timber harvesting

For each of the alternatives, we will show the biological and economic maximum volumes The biological maximum will show the maximum volume (ASQ) the land is capable of producing based on the management-area allocation, regardless of the costs The economic maximum (maximize PNV) will show the maximum volume capable, based on costs and revenues These Maximum Timber runs will show the costs of the timber program as well as the volumes

Many have also asked what would happen if we allowed harvesting on all of the tentatively suitable timber lands (TSTL), about 750,000 acres Setting up a model to cut all the TSTL is a max-timber benchmark We will be running a model for this scenario and show the benchmark results

In the FEIS, we will also show the effects of harvesting aspen In the DEIS we did not harvest aspen because we thought there was no demand or value for it Based on the public comments, we will give a value to aspen and determine what ASQ component aspen can contribute

20.19 What was the methodology behind your timber supply-and-demand study, and why wasn't it based on econometric methods to represent price-quantity relationships?

To reasonably respond to the question of why we did not utilize econometric methods to represent price-quantity relationships, it would be helpful to review the state of the research and process direction applicable to subregional markets of the size typically influenced by individual national forest timber supply decisions Such a review will place the Rio Grande NF's methodology and assumptions in perspective, thus removing the temptation to use technically more rigorous approaches as a yardstick against which to judge our efforts

Methodology employed in investigating sub-regional stumpage demand relationships, such as on the level of a market area defined by a single National Forest's area of influence, has evolved slowly for the past 15 years Early efforts by Schreuder et al (1976) focused on single equation estimates of demand in Forest Service Regions 5 and 6 The same methodology was more recently tested on the Grand Mesa, Uncompahgre and Gunnison National Forest in 1987 The results of both investigations could not conclusively demonstrate a downward sloping demand curve. In fact, 18 of 24 National Forests investigated in Shreuder's study produced coefficients on stumpage price of the wrong sign -- in other words an upward sloping demand curve These single equation estimates, or for that matter, any econometric estimation of stumpage demand is frequently limited by lack of data The limited number of time series observations and missing data will, therefore, often preclude beforehand attempts to directly estimate stumpage demand at a local level

Recent efforts (eg, Majerus 1982, Connaughton et al 1988) have focused on a methodology termed "disagregating larger area demand equations" (regional) to the local level In practice, the demand curve for the National Forest is derived by subtracting the nonnational forest's supply curve from the regional demand curve for all stumpage ownerships Use of this methodology is dependent upon availability of empirically derived demand relationships for a larger market area such as the State of Colorado

To summarize problems with applying this approach, it has been demonstrated statistically that as an individual national forest's, or other geographic entities, proportionate share of the larger market areas supply decreases, the standard error of the derived demand estimate increases Jackson (1983) likens the process of disaggregating large area demand equations to the process of enlarging a snapshot to better see a small object The greater the magnification, the greater the distortion So too, disaggregating large area demand and supply equations to the level of an individual forest distorts theoretical relationships Majerus (1982) demonstrated this result by disaggregating supply and demand equations for the State of Montana to the individual National Forests comprising the analysis area The disaggregation procedure yielded prodigious errors for the derived demand curves when the relative market share of an individual national forest was less than ten-percent ($k < 1$ in equation 1) Standard errors of estimate ranged from a low of 30-percent for the Kootenai N F with a mean market share of 16 percent to a high of 2,098 percent on the Custer N F which had a mean market share of 2/10 of one percent The Rio Grande National Forest's proportionate share of the 1993 RPA Timber Assessment for the Southern Rocky Mountains may be less than two percent Therefore, prodigious standard

errors of estimate would be expected if these estimates were stepped down to the National Forest level Similarly, one would not expect that the market relationships which exist in the seven-state area would necessarily hold in a small, substate area In the alternative, disaggregation of the demand relationship from the state level may potentially have been more fruitful because of the study area's higher percentage contribution in relation to total state supply However, the approach is not feasible because directly estimated equations are not available for the State of Colorado

Recent applications by the San Juan NF represents a first attempt to simultaneously estimate stumpage demand and supply relationships at a local level The methodology used in San Juan study had been more recently employed in regional analysis by Majerus (1982), Jackson (1983), Daniels and Hyde (1986) and Connaughton et al (1988) This extension of simultaneous estimation methodology, to local level analysis is somewhat new having first been attempted in 1988 In addition, given the rigorous time-series data requirements of the San Juan study (30 plus years of time series observations), we concluded that application of this methodology would not have been appropriate to our immediate situation

This leads to an important question Is the horizontal demand curve that we used a reasonable assumption? and/or is it contrary to conventional economic theory? -- The markets that the Colorado timber industry participates in is no longer regional, but national and international This has been demonstrated in recent years by the effect of Canadian lumber on prices throughout the U S , including markets served by Colorado West Slope mills, and by the participation of West Coast purchasers in Region 2 timber sales At the local market level, the combined output of wood products produced by manufacturers located in the San Luis Valley will have no influence on product prices Manufactures in the San Luis Valley therefore face a horizontal demand curve for their product -- even more now than at any time in history

"Elasticity" -- a technical measure of the price-quantity relationship of a demand curve -- is another way this phenomenon can be described. The elasticity of the manufactured product demand curve has a direct bearing on the elasticity of the stumpage demand curve The greater the elasticity of demand for finished product in the manufacturing sector, the greater the manufacturers elasticity of demand for an input factor of production (stumpage) For that reason, stumpage demand on theoretical grounds is hypothesized to be highly elastic (approaching horizontal) at the local level

The results of past econometric research supports this elasticity hypothesis In most studies, the null hypothesis of a zero price coefficient (i e price does not affect quantity demanded) could not be statistically refuted Or where the alternative hypothesis of a downward sloping demand curve was demonstrated, the results were highly elastic (eg , the San Juan elasticity was measured in the range of -1.31 to -1 80 depending on model specification, and in an earlier study, elasticities for individual National Forests in Montana ranged from -1 46 to -147 0) Regional stumpage price elasticities, on the other hand, are usually in the range of -0 18 to -0 50, in which case alternative stumpage supply decisions have a measurable influence on stumpage price

It appears in practical terms then, that the horizontal demand curve would not be considered inaccurate, but rather a very reasonable assumption given economic theory regarding local price elasticities, results of applicable research, current trends in lumber markets, and the absence of local research to refute the assumption

Our approach to estimating timber demand ultimately relied on quantifications using information on the area's processing infrastructure, timbershed cut levels, evaluation of the availability of substitute supplies, and evaluation of historic price trend

20.20 What objective functions are used in the FORPLAN models? Shouldn't rollover runs be performed?

FORPLAN is an optimization model The objective function is used to tell the model what is to be optimized In our runs we optimized for maximum volume or maximum Present Net Value (PNV)

We used the maximum volume objective function to determine what volumes are possible, regardless of costs or other economic indicators

"Rollover" runs are optimization runs where two objective functions are given In this case the model performs all its calculations based on the first function, and then, based on the answers from the first run, the model works to optimize the second objective function

Rollover runs represent the maximum amounts mathematically possible Accusations have been leveled at us that we "just don't want to harvest timber" because we didn't perform rollover runs Analysis shows that models using rollover objective functions were able to harvest 2--5% more timber

Using the most optimistic maximum volume amount possible from a computer model in a strategic forest plan isn't prudent There are inherent levels of confidence in all data used in the plan Inventories are based on statistical samples, vegetation-simulation models depict growth and yield of stands over 200 years using equations based on samples and measurements with some statistical confidence, and then harvest amounts are based on average costs and revenues, and acreage calculations which are averaged and rounded. Big fires do occur every so often, heavy snows stay through the summer or drought conditions are realized by April, and insects and disease prevail on the landscape despite man's intervention We hope for the best but expect the worst, and plan for something in between So trying to increase the harvest amount by 5%, when all statistical indicators scream for a reliability of only +\- 10 to 30 %, is not prudent or professionally sound

20.21 Was there any review of the FORPLAN model? Will there be changes made to the FORPLAN models? Were any errors or needs for improvements found?

The FORPLAN models were reviewed by several different sources They included a consultant for Intermountain Forest Industries Association (IFIA), the regional economist and analyst for the Rocky Mountain Region, a Colorado State University professor, a researcher from the Rocky Mountain Forest and Range Experiment Station, and two analysts from the Ecosystems modeling group of the Washington Office

Errors were found in the FORPLAN model These include silvicultural prescriptions which were not given to some strata, constraints not used in some alternatives, reports based on the wrong units, incorrect analysis-area acreages, and costs for brush disposal that were inaccurately portrayed These errors will be corrected in the models for the FEIS.

Improvements in the FEIS models will include revenues for aspen, calculation of a separate ASQ for aspen for use as a Noninterchangeable Component (NIC), improved EIS cost association to each Roadless Area, updates to cost and revenue values, and a review of relationships between standards and guidelines to certain constraints

Aspects of the model which were examined and verified as correct were ASQ, long-term sustained yield, nondeclining flow calculations, use of constraints, and calculation of structural stages for all the forest

The growth-and-yield work was reviewed and found to be sound The volumes were based on a decade average, with the decade starting in 1995 Some suggested we grow all stands another year, so that the decade started in 1996 to coincide with the release of the FEIS After some discussion it was determined that one year's growth would not make any statistical difference in the growth-and-yield calculations, which are carried out for 200 years This is particularly true when one considers stochastic events like the variability of weather

20.22 What is the Forest Service's role in rural economic development? What role does the revised plan have?

Since its inception in 1905, the Forest Service has expressed concern for forest dependent communities Contributing to community stability has always been one of the objectives of forest management Traditionally community stability was promoted through the adherence to the principle of sustained yield Managing a forest according to sustained yield principles was to ensure a continuous flow of products from the forest In turn, the continuous flow was to contribute to the economic stability of local communities and industries.

This relationship between national forest management and community stability was codified into law in 1944, with the passage of the Sustained Yield Forest Management Act This was reaffirmed in the Multiple Use and Sustained Yield Act of 1960, and was followed in 1963 by the adaption of an even-flow policy also aimed at stabilization of communities and opportunities for employment The commitment of the Forest Service to the stability of forest-dependent communities was further emphasized in the National Forest Management Act of 1976 NFMA required the Forest Service to manage the forests according to non-declining even flow and to consider community stability during forest planning and management

The 1990s signaled a shift in the Forest Service commitment to rural community development Heightened emphasis on the Forest Service role was expressed by then Chief Dale Robertson (1990), who stated, "I want everyone to understand that rural development has a high priority in the Forest Service and is a highly relevant part of our mission " This commitment lead in the 1990 Farm Bill to a major expansion of the Forest Service's Community Assistance program with the National Forest-Dependent Rural Communities Economic Diversification Act In the words of the USDA Forest Service, one of the purposes of this Act is "[to provide assistance to rural communities located in or near National Forests and that are economically dependent upon forest resources or are likely to be economically disadvantaged by Federal or private sector land management practices" (USDA Forest Service, 1992)

The Forest Service rural development strategy, in the document Working Together for Rural America (1990), presents our overall policy for working with rural people and communities "The Forest Service will provide leadership in working with rural people and communities on developing natural resource-based opportunities and enterprises that contribute to the economic and social vitality of rural communities " Three Forest Service rural community assistance goals particularly highlight the relationship between rural development, local communities, and forest planning

1 Consider rural development in resource decisions

2 Understand the needs of diverse communities.

3 Provide timely and current research and resource information

To obtain Forest Service assistance, communities must establish community strategic Action Plans through broad based community involvement The community-based strategic planning process, under optimum conditions, engages community members in extensive strategic planning, community wide project development, and implementation These plans recognize the strengths and weaknesses of local economies and focus on promoting realistic goals and opportunities, some of which are tied to natural resource based opportunities provided by the national forest

Procedurally developing an action plan is the same as developing a forest plan. These obvious linkages are strong, in fact so much so that they should be viewed as a seamless

process of planning and implementation that reflects the integration of community and ecosystem needs in developing locally based ecosystem management strategies Rural development action planning and forest planning require the same types of information regarding community perspectives and desired futures, both rely on the same social and economic data to make relevant choices, and both strive to seek compatibility between economy and ecosystem and compatibility in direction to be successful

What we have strived to do in formulating the Rio Grande NF LRMP is to link rural development and forest planning We recognize that social and economic analysis are part of rural development analysis and have conducted these analysis to determine what effect our actions have on local communities and the people using natural resources For example, in order to determine the Forest Plans effects on rural development, we have looked at the lifestyles in the communities which includes citizens attitudes, beliefs and values The objectives of the social impact analysis has been to identify potential public needs and concerns that resource officers must consider in the decisionmaking, and to inform agency decisionmakers and publics of potential social effects that might occur as a result of our actions Additionally, we have spent a lot of time out in the community conducting community forums This has allowed us to look beyond our traditional sources of information (such as the socioeconomic data bases) to community leadership, institutions and the activities of everyday life at the local level to help define existing/desired future conditions in our attempt to integrate the communities preferred future into the land management planning process.

So, fundamentally we have attempted to respond to two basic questions First we have asked communities, "how are we doing and does our management fit with what you want now and in the future?" and secondly, "How do our plan revision alternatives meet your present and future needs and how could we adjust alternatives to better meet your needs?" This approach is reflected in the Forest Planning strategy for the Rocky Mountain Region of the Forest Service (1993)

20.23 Is there a relationship between the economic impacts of recreation and the recreation budget of the Forest?

Yes, there is a strong relationship between our budget and the recreational use of the Forest The economic impacts come from the amount and types of recreation hunting, fishing, camping, sightseeing, backpacking, skiing, etc

The amount and type of recreation on the Forest depend on the campgrounds, trails, roads, ski areas, picnic grounds, fishing docks, etc which the Forest constructs and maintains While there will always be some recreation on the Forest independent of our recreation budget, larger amounts and the mixture of use do depend on our funding

The economic benefits of recreation are based on spending patterns These vary by the type of user and are based on market surveys Whenever fees are collected, as in campgrounds, values are based on actual revenues

20.24 What is the relationship between employment and income numbers in the economic-impacts section? Different industries have really different numbers when comparing employment and income impacts; they just don't seem proportional

Based on the different outputs of each alternative, economic impacts were modeled for each business sector Employment numbers are in units of Full-Time Equivalents (FTEs) FTEs are not necessarily jobs One person could have two half-time jobs, which would equate to one FTE Or a person may have a winter seasonal job and a summer seasonal job, which is also one FTE

Recreational jobs in this area tend to be seasonal Timber jobs are more full-time and pay better. When comparing these two sectors, or any sectors, the types of jobs, their average

wage, and the goods and services provided must be part of the consideration Generally, manufacturing jobs produce a greater economic benefit to a regional economy than do service jobs

20.25 Why are volumes in the DEIS and Plan reported in MCFs?

We tried to show both cubic and board measurement wherever possible a couple of years ago, the Forest Service began to sell all commercial timber in cubic measurement This is a more accurate assessment of volume sold and processed

Cubic measurements are also used in our growth-and-yield simulation models, the determination of culmination of mean annual increment, and other small timber products (If you think cubic measurement is tough to relate to, you'll love the move to metric.)

20.26 Can't a FORPLAN model be prepared for Alternative a?

Alternative a was formulated to meet the public's desire to see the impacts of no commercial timber harvesting Since FORPLAN is designed to show the scheduling of commercial timber harvests, we saw no reason to make a FORPLAN run

Since FORPLAN will show only costs, revenues, and outputs based on cutting timber, a run for Alternative a will show no costs, no revenues, or outputs The FORPLAN model would show the structural stages of the Forest over time, but that answer can be determined using a spreadsheet or some other modeling tool

20.27 What is the purpose of the FORPLAN model? In the last round of planning all resources were modeled in FORPLAN; is that the case in this DEIS?

The Rio Grande National Forest FORPLAN model was constructed as a model for timber-harvest scheduling The model determines what volumes are possible based on the allocations of each alternative, the constraints, and other economic considerations As the model works, it also gives us the costs and revenues of the commercial-timber program

During the late 70's and early 80's, many FORPLAN models tried to integrate all resources The biggest concern about this approach was the incredible gap of information to back up the numerical relationships depicted in those FORPLAN models between various resources Since then, we have found that some cause-and-effect relationships cannot and should not be numerically described, nor modeled, in a linear-based optimization model

With the advent of GIS and PC software, analysts now have several other tools to predict interactions of various resources We are now using FORPLAN to model timber harvesting and scheduling only The information from FORPLAN is used with other models, spreadsheets, etc to determine Present Net Value (PNV) and other economic indicators, impacts on various resources, and other metrics.

20.28 The Analysis Process appendix referred to "constraints." What are constraints and how were they used in the FORPLAN models?

Constraints are limits or restrictions on values The term "constraint" is being used in its mathematical context Constraints in FORPLAN are really equations which set the limit of a relationship In the example $a > B$, a must be greater than B This is similar to saying revenues must be greater than spending

In the FORPLAN model, constraints set up limits on when an area can be harvested, how many acres can be cut and where, what mix of silvicultural systems will be allowed, or how many miles of road can be built

Constraints were used to protect water quality, to ensure a mix of silvicultural prescriptions was applied, and to do some "what-ifs" for limits on budget and access to roadless areas

To build a FORPLAN model takes several steps develop a yield and data file, build the matrix files, solve the model, interpret solution, build reports and build solution database files This entire process takes anywhere from 6--8 hours, depending on the alternative and the speed of the PC

One trick of the trade which really confused some reviewers was the inclusion of nonbinding constraints in the various alternative models Several of these nonbinding constraints were entered into all models so that "what-if" scenarios could be solved These included the budget and unroaded/roadless constraints This technique was used so that the constraints would be available for editing in the matrix files Three to five hours were saved not having to generate a new set of matrix files for each what-if scenario

21. FSH, FSM, Policy, Procedures, Laws, etc

21 01 In General, I am opposed to the current FS policy which allows the arbitrary and capricious opening and/or closing of FS trails to use by motorized traffic (Motorcycles and 4 wheelers).

Forest road and trail designations (Open/Closed, Motorized/Non-motorized) are the result of the Forest Travel Management Plan Trails open to motorized access outside Wilderness are shown on the Selected Alternative (G) map

Designations will be shown on the Forest map that is sold to the Public. Any proposed changes of those designations would require an environmental assessment and would include public notification and the opportunity for the public to comment

21.02 I have seen numerous uses of ATVs by children with no adult supervision, driving recklessly on FS roadways and trails, as well as off-road. I feel this is exposing the FS to possible litigation in the event of ATV accidents.

ATV use doesn't require a license (for the vehicle or the operator), but ATVs are not allowed on Forest system roads If caught, the operator will be issued a citation

21.03 I generally agree with Alternative D, but again urge that the Forest Service use a criterion of "minimal impact."

Resource development is authorized either by permit or by contract, both of which have specifications that limit the type and degree of development Performance bonds are required of all contractors with the U S Government

21.04 An area of concern...is ENFORCEMENT of the Rio Grande NF's rules and regulations.

Forest regulations are enforced as required by law

21.05 I do not object to paying for using Forest resources, but still find many people helping themselves to firewood and other Forest resources without the proper permits.

Resource removal requires a permit Removal of firewood or other Forest resources without a permit is a violation Citations are issued to violators we catch

21.06 **After reviewing the provisions of Alternative D, the preferred alternative, I find it impossible to believe that such a fair and open process took place.**

It seems far more likely to me that once again timber interests were pandered to...it is strange not to even see a representative of Stone Industries, Louisiana Pacific, or other logging companies present their view.

The public-involvement process is a matter of record The Planning Staff of the Rio Grande National Forest (RGNF) either sponsored or participated in at least 100 meetings and listened to all points of view Alternatives were developed based on public concerns, and analyzed Outputs were a result of the analysis, and not predetermined We feel that this is the strength of the alternatives

Timber industry representatives were included in the public-involvement process The timber resources and all other Forest resources were given equal consideration throughout the process, which fully met the requirements of 36 CFR 219 6 (Public Participation)

In the end, the responsibility to make a decision lies with the Forest Service (FS) We have made our decision based on the entire public-involvement process, and what we heard from the people who chose to be involved in that process

21 07 **I do wish the video had shown who the Forest employees are who are responsible for 1) the data collection, 2) the decisions, and 3) implementing the decisions.**

As you realize, there is a pervasive feeling that while great efforts are made to collect opinions from the various interest groups in the public, these opinions really don't count.

The intent of the video was to portray the many points of view of Forest users, and the complexity of the decisions the FS is making The RGNF staff is responsible for data collection The person responsible for the decision is the Regional Forester, Elizabeth Estill Forest Staff are responsible for implementing the plan

Concerning your second comment, we disagree Public opinion does count--as should be evident both in the process and in the decisions made in the Final Plan All opinions are given equal weight The public-comment process is not a vote, rather, as we have maintained throughout, the FS is looking for good ideas that make a difference in Forest management, regardless of the source

21.08 **Timber resource management in all of our National Forests will have to respond to the Gorton/Hatfield "salvage" rider in the Rescissions bill signed into law this month. When this bill becomes effective, Plan D is far more vulnerable to massive salvage operations than Plan E. It is our understanding that the Gorton amendment was written by the timber industry, for their benefit and not the benefit of the tax-paying citizens of this country, essentially allowing industry to override all environmental laws.**

The Rescission Bill contains nothing that would require a change in the alternatives presented in the Draft or Final Plan documents The Bill was written and sponsored by Senators Gorton and Hatfield in response to concerns about dead or dying timber resources on the National Forests

21.09 **Plan D also maintains current grazing levels for the RGNF Forest...Ranchers would no longer have to answer to enforcement of conservation regulations, but anglers, hikers, hunters, and off-road-vehicle users would be liable....Plan E cuts grazing allocations in half, which would at least protect a greater amount of forest from the Public Rangeland Management Act.**

You are correct, Alternative D does maintain grazing at or near current levels Reductions in grazing will occur under the Final Plan as Grazing Allotment Management Plans are completed. Ranchers are subject to the same environmental-protection laws as all Forest users, and if found in violation can lose their grazing privilege You are correct, grazing levels in Alternative E are lower than in Alternative D

21.10 **[The FS should] use small timber companies other than conglomerates that provide lumber worldwide.**

The FS has the responsibility to manage the timber resources on the RGNF The FS has no say in the decisions of large or small timber companies to set up operations in the area

21.11 **...another way to take pressure from the existing area is by opening roads that cross private lands for, say, a quarter of a mile to Forest land. The landowner now has virtual control of public land and we pay taxes on the land to support it. If a landowner refuses the right-of-way to public lands, he should not have grazing rights on the public lands.**

Access to public land through private land requires that the government negotiate and obtain a right-of-way. Unless a right-of-way is obtained, the private landowner has the right to deny access through private property Grazing privileges have nothing to do with rights-of-way across private land.

21.12 **Why should a bureau framed on principles of sustainability be selling nonrenewable resources? I thought the draft EIS was sketchy on this topic.**

We agree The Minerals discussion in the Final Environmental Impact Statement has been expanded to include a broader discussion of mineral extraction from public lands Hard rock mining is allowed on the National Forests under the 1872 Mining Law, as amended (See the Minerals Comments/Responses)

21.13 **The DEIS fails to fully analyze the impact of the alternatives or to fully document the basis for the determinations made regarding the effects of each alternative. NEPA requires that analyses be based on the most recent science, and that scientific reference be incorporated into environmental analyses**

While there is ample scientific reference for many descriptive parts of the Draft Forest Plan, there are numerous determinations of "No Effect" or "Not Likely to Adversely Affect Forest Resources" throughout the documentation. This is a major flaw in the DEIS for the Forest Plan, and the failure to base determinations of effects on resources on documented science is a violation of NEPA

36 CFR 219 12 (d) stipulates that each Forest Supervisor shall obtain and keep current inventory data appropriate for planning and managing the resources under his or her administrative jurisdiction The Supervisor will assure that the interdisciplinary team has access to the "best available data " We believe this requirement has been met the data used are the best available, and are also of high quality

21 14 **Numerous statements in the DEIS refer to adequate amounts of late-successional forest existing outside the Forest boundary, ignoring the large amount of logging to the south on private and National Forest lands, and impacts such as development and population growth.**

The Carson National Forest has several timber sales planned on the Tres Piedras Ranger District, just south of the RGNF, and these are reducing the acreage and quality of old-growth and late-successional forest. There is also logging in the

Chama area, resulting in loss of habitat and old-forest components, and increased development, home building adjacent to forested lands, etc

Thus the statements regarding cumulative effects and risks to species dependent on old forest need to address these impacts outside the RGNF boundary. These adjacent impacts and loss of forest habitat point to the importance of the RGNF to provide habitat, and to consider the impacts of its planned actions across the landscape.

We disagree The discussion of the Ecological Hierarchy (DEIS pg 3-26) discusses the age and distribution of Forest cover types well outside the Forest boundary It also addresses the role the Forest plays within the San Juan Ecosystem in the Southern Rockies and is central to the application of landscape-level analysis

Code of Federal Regulations 36 CFR 219 12 (D)(g), Estimated Effects of Alternatives, states that the physical, biological, economic, and social effects of implementing each alternative considered in detail shall be estimated and compared according to NEPA procedures "Cumulative Impact" is described in the C E Q Regulations (at 1508 7) as the impact on the environment that results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency (federal or non-federal) or person undertakes such other actions

We agree that cumulative impacts such as you describe are important We feel, however, that the discussion of cumulative impacts in the Draft and Final documents is adequate at the programmatic level that these documents address Many of the specific impacts that you describe would more appropriately be addressed at the project or landscape levels of analysis

21.15 **Why wasn't the Watershed Conservation Practices Handbook included with the DEIS for public comment? If this is the document which will guide watershed practices, and insure protection of this important resource, the public must be given opportunity to comment on this handbook!**

The Watershed Conservation Practices Handbook is in draft form and was incorporated into the RGNF Draft documents by reference The Draft WCP Handbook has been available for comment through the Region 2 Regional Forester's Office in Lakewood, Colorado Our intent is to incorporate the final document into the Final Forest Plan Until that document is finalized, however, we are using the 17 Regional Standards contained in the Handbook and incorporating appropriate design criteria as Guidelines.

21.16 **There is mention of the possibility of failure to apply mitigation measures correctly, etc., on page 3- 231. How will the FS insure that mitigation measures are correctly applied and followed? Where is the rating for effectiveness of mitigation measures, by alternative? This needs to be done.**

In context, the statement on page 3- 231 implies that where human actions are taken, the potential for failure is also present Our intent is that mitigation measures will always be applied correctly Mitigation measures are identified in Environmental Assessments and usually applied through the terms of a contract.

Mitigation is spoken to in the CEQ Regulations at 1502 14(h), 1503.3(d), 1505 3, and 1508.20 None of these include a requirement to rate the effectiveness of mitigation measures in planning documents. The effectiveness of mitigation measures would most appropriately be addressed in the monitoring plan Please refer to Chapter 5 of the Final Forest Plan

21.17 **The FS needs to conduct a more SITE-SPECIFIC analysis for the EIS. Too many projects are left for later NEPA analysis. The DEIS needs to analyze these actions now, and**

not put off analyzing these projects and their impacts at some later time. Also needs more thorough analysis--not merely listing acres affected--but HOW they will be affected.

The C E Q Regulations at 1502 4(b) speak to Environmental Documents at a broader scale or programmatic level, which would include Forest Plans Essentially there are two decision levels addressed by Environmental Impact Statements (1) programmatic, which includes Forest Plans; and (2) site-specific, which would include timber sales, road construction, or a similar activity Chapter 3 of the Environmental Impact Statements describes the types of activities that are expected to occur, the number of acres they are expected to occur on, HOW those acres are affected, and what mitigation measures might apply

21.18 **For years the FS's main emphasis has been to "cut down trees." The FS must move out of the "palm of the hand" of the Timber Industry and ranchers. The decisions need to be based upon Science (biology/ecology) instead of the old, out-dated, culture of the FS (i.e., anti-wilderness, pro-cut down trees for the Timber Industry).**

The process we used to develop the Forest Plan and EIS can be described as "U-shaped " We thoroughly explored the science down the left side of the "U" and then turned and went up the right This is where we plugged people and their needs into the science

Out of this we built the alternatives (based on a mix of biological and social sciences), and then we analyzed them From that analysis we got our numbers, which include the amount of timber to be harvested

Any proximity of numbers between the alternatives is coincidental We feel the range is representative of public concerns, and that the strength of the alternatives is the way they were developed and analyzed. In this way alternative outputs are clearly a result of analysis and are not predetermined, as in the past

21.19 ***D - stronger Standards and Guidelines for the protection of Forest resources.***

Standards and Guidelines have been modified based on comments received between the Draft and Final Plan documents Please note that all existing legal, policy, FS Manual, and regulatory requirements have been incorporated into the Final Forest Plan by reference

21.20 **At times this summer we observed two people in a Forest Dept. 4 x 4 vehicle just sitting, or one person in a 4x4 drive into the Park, up to a creek, get out to look over the bank then drive away. Whatever they were supposed to be doing it seems these people could be putting in time maintaining the camp ground, which is badly needed.**

Your concern is noted Forest employees are engaged in numerous assignments that vary in nature We can only suggest that those you saw were doing their jobs Also, employees are allowed to take short breaks (one in the morning and one in the afternoon)

21.21 **My last concern continues to be regulation of the general public in the San Juan - Rio Grande NFs I think your education efforts are very good, but there needs to be a tighter system of accountability.**

Your concern is noted Please refer to 21 04

21.22 **Although our company does not purchase a significant amount of timber from your forest, Duke City Lumber Company and other private forest-products interests are very disturbed about the overall timber supply in Regions 2 and 3. Reductions in**

ASQ and the resultant mill closures and increased reliance on private timber resources have greatly affected may local economies both in Colorado and New Mexico.

Your concerns are well founded The amount of timber available from public lands is decreasing, due to increased public concern about the management of the resource The FS accepts the responsibility for the management of timber resources on public land We do not accept responsibility for decisions to close mills, wherever they are

21.23 **In addition, we are concerned about right-of-way special-use permit problems that we have experienced recently involving accessing private inholdings of timber resources for our mill**

Without knowing the specifics of your concern, it is not possible to respond to it

21.24 **All the proposed plans seem to further restrict the use of the forest by the people who own it, THE TAX PAYER! It seems you're trying to go from over management in NA to micro management in A, B, D, E, and F, WHY? The forest is not over used!**

When a citizen abuses an area it's for one of two reasons. #1 Ignorance. Teach the people to love and care for our public lands, to tread lightly, to use with wisdom, #2 They destroy in retaliation to greater governmental control "communism". Less control, smaller government, and more freedom to choose, it's the only answer

We disagree All of the alternatives were developed in response to concerns expressed by the public (the taxpayers) The alternatives are aimed at resolving concerns expressed by the public, rather than restricting public use

We agree that the Forest is not overused Rather, specific places in the Forest are overused, and suffering damage as a result We ask the public to use other areas of the Forest while these areas recover

The San Juan - Rio Grande NFs have significantly reduced our staff over the last three years and will continue to do so as budgets decline We anticipate that budgets will continue to decline

The Forest has a public-education program that has been (and, we expect, will continue to be) very successful

21.25 **I am sure many people ride off-road and should not do so. When I asked why not have a FS Patrol and hand out tickets, fine them then publish names and offense in the paper, it would tend to stop these offenders. Another thing I was told by the FS people, is they do not work on Saturday and Sunday. This I don't understand. Are they not public servants? With proper scheduling, this could be worked out.**

You are correct, violations do occur When caught, people in violation are issued citations and pay for their offense We are public employees, some of us work on Saturdays and Sundays, some of us do not

21.26 **You have not considered timber workers in the Forest Plan.**

People are an integral component of the Plan It addresses the effects of people (their demands) on Forest resources, and it addresses the affects of resource decisions (timber supply, etc.) on people and communities This is a serious responsibility, one that the FS does not take lightly

21.27 **If you must (and I do not see any reason) close roads, close it to everyone--do not discriminate against the handicapped--the elderly and those that are not physically able.**

Travel managers have reevaluated the roads that were proposed for closure in the Draft documents, and reduced that mileage significantly in response to the public comments we received The roads identified for closure are closed to all Administrative (FS) access may be allowed on a case-by-case basis, but this will be the exception rather than the rule

21.28 **I urge that logging, roading, mining, grazing, domestic animals, dams, and all forms of off-road vehicles be eliminated on this National Forest Area to save the RGNF.**

We understand your concern, but the complete elimination of any resource development or use runs contrary to several laws under which all National Forests are managed This type of decision is beyond the scope of this document

21.29 **We do not agree with the closing of the RGNF at all, by any plan you might present. We have reason to believe do not have all the facts.**

To begin with you have already surreptitiously closed many roads and trails in the valley forest without permission of the people in the various counties. All roads and trails in the RGNF built before 1975 belong to the people in the respective counties, thus they are private property of the citizens of these counties.

The RGNF will not be closed by this or any other Plan Certain roads may be closed based on resource damage (primarily), but the total access picture will factor into any decision to close a road.

Two points need to be made regarding county ownership of roads and trails. The first is that some of the roads on the Forest were in existence prior to the establishment of the RGNF (1906) If one of these roads is proposed for closure, then the county in question must claim ownership and accept responsibility for the maintenance and liability for public use of that road

Next, the courts have, in several cases, upheld the federal ownership of National Forests over county ownership Until the courts decide differently, we maintain federal jurisdiction over National Forest lands

21.30 **While we applaud the FS's view that people are part of the ecosystem, we encourage your leadership on the RGNF in helping all of us live in a manner consistent with that reality. In short, we ask that the RGNF be exemplary in helping our society shift from environmentally harmful practices to state-of-the-art sustainable activities.**

We feel that our Public Education program is very effective in working toward the achievement of the goals you describe We feel very good about the decisions made in the Final Forest Plan. You will have to be the judge as to how well they meet your goals

21.31 **The FS must not allow the military in the Wilderness, or over noise-sensitive areas. Buck Buckingham from Buckley Air Force Base said he wrote the 2000'-flyover regulation. How did that happen? In the first place the junior birdmen do not fly at 2000', they fly at treetop level. The military will be using public lands for the "full training." Please stand tall on this one.**

The military-flyover decision is outside of the scope of this document. The 2000' rule has been in effect for many years in Wilderness Areas It is the minimum height aircraft can fly over them, unless an exception is made Exceptions are usually granted only when human life is at stake (rescues, etc)

21.32 **Nowhere in the DEIS, Summary of the DEIS, or video tape is there a mention of national input "...series of public meetings held. .all over Colorado, San Luis Valley and in Chama, New Mexico. Comments solicited.. reform the alternatives" (pg. 4 and 5, Summary DEIS). This would tend to indicate only Colorado and local individuals are the main or only customers that should have input as to the future of the RGNF. A NATIONAL forest resource needs a NATIONAL basis for planned forest management ideas.**

We agree There are reasonable physical limits, however, to how many places the Planning staff can travel to, seeking public input At all our meetings, we encouraged people to spread the word regarding the Revision of the Forest Plan We believe we were successful

While the majority of the comments we received did come from local or regional residents, we did receive comments from people residing in just about every state in the nation The record of comments received is on file at the Forest Headquarters in Monte Vista, Colorado

21.33 **No customer type or types are defined in the DEIS, Summary of the DEIS, or the video Reference is made that contact of Hispanics and native Americans was due to their large number percentage of the local population (DEIS page 1-3). There is also mentioned "Rapid growth. in outdoor activities...by...senior citizens" (DEIS page III-332).**

What customers are the emphasis of the Forest management? Is it the young recreational hiker, the less mobile senior citizen, the money generating forest harvester, or the grazing cattleman? These Forest customers need to be categorized and prioritized in order of management and Forest-use importance.

We disagree All Forest customers are emphasized in the Forest planning process

21.34 **It is also evident from some of the Forest areas reclassifications that the customer and commercial producers do not receive similar consideration. Example, Fern Creek area above trailhead open to forest harvesting but closed to motorized vehicle traffic**

You are correct that the areas above the Fern Creek trailhead are managed under prescriptions that allow timber harvest in Alternative D These areas are also open to motorized access on designated roads and trails The Fern Creek trail is closed to motorized access (motorcycles and ATVs) because it leads into Wilderness trail systems, where motorized use is specifically excluded by law

21.35 **Finally, management objectives need to be clearly defined and documented.**

Regional and Forestwide Objectives are described in Chapter 2 of the Revised Forest Plan

21.36 **I would like to see the RGNF returned to a multiple-use status.**

The management philosophy for the Forest has been and will remain based on multiple use of Forest resources

21 37 **.. the sustainable yield on the Forest exceeds 350 million feet per year while your Plan calls for 7 million To me this is a complete give away to the environmental group and the Forest, instead of providing jobs and stability to the area, will age and die and become a liability.**

The ASQ identified for the preferred Alternative (D) in the Draft documents is 20 6 mmbf. The harvest level under the experienced budget is 7 mmbf These figures represent a level of harvest that is compatible with the protection of other Forest resource values.

21.38 **I don't think it is right to let people from all over the country decide the fate of our National forest. We have depended on it for generations for our living.**

Many people feel the same way The National Forest System is composed of public land that belongs to all citizens of the United States, though, and any citizen has the right to comment on the Forest Plan

The FS has the responsibility to make decisions based on the comments that people made The majority of the comments received came from the San Luis Valley We also received comments from people living in all parts of the United States

21.39 **Please do the right thing for our wildlife, not big business (Stone Container), ranchers, or motorized sportsmen.**

The Forest has three primary priorities the protection of (1) soil productivity, (2) water quality, and (3) biological diversity Resource production occurs only if these three priorities can be met

21 40 **I would that the Colorado Association of 4-Wheel Drive Clubs be informed in the future when these roads are reviewed for obliteration**

The Forest Plan sets the direction for road closures over the next ten years The Districts make the decision for each individual road closure The decision is the result of environmental analysis, which includes the opportunity for public comment Obliteration is only one option that is considered for road closures

21.41 **An FS truck with two employees came by our camp and went up a old road and closed off a spur that goes to the top of the hill. We had two of our guys up that short spur with ATVs at the time. When our guys returned they asked my why the FS *closed off the road during the season. I could not give a good reason knowing that* they are supposed to do this BEFORE the season begins**

You are correct that road closures are usually effected before the hunting seasons begin It is difficult to respond without knowing the specifics of the situation At a minimum, the closure could have (should have) been explained, given the close proximity of your camp

21 42 **My first concern with Preferred Alternative D focuses on wording that equates Forest management and support for local economies If local economies benefit from sound Forest management, that is all right; however, the sole purpose of sound Forest management should be the health of the Forest A Forest management plan should not be designed specifically to enhance or support local economies.**

I believe that Preferred Alternative D's concept presents a flawed premise for sound Forest management because it makes the "viability of the local economy in and around the San Luis Valley" a primary consideration in the management objectives, rather than a by-product of good Forest management.

Sound Forest management should be equated with Forest health Forest management *also plays an important role in the local economy Both are serious responsibilities* Timber, recreation, grazing, mining, and other activities will occur, but not at the expense of resource protection (Please refer also to the response at Pol- 39)

21.43 ***Misquote of Bob Dylan, should be "I'll let you be in my dreams if I can be in yours***

You are correct if you listen to the "official" recording by Mr Dylan If you listen to several "unofficial" recordings by Mr Dylan, however, the quote in the Draft document is also correct

21.44 **The alternatives do not "express a relatively moderate anthropocentric perspective of the environment"; they express a strongly anthropocentric view--say it like it is!**

It is a matter of perspective We disagree

21.45 **The section on Disturbance processes is riddled with loophole language such as "to the extent possible."**

The Final documents have been edited to eliminate anything that might be construed as "loophole language "

21.46 **Alternative D, the preferred alternative, consistently graphs out high in its impact on resources and high in commodity output.**

It is a matter of perspective Alternative D also graphs out lower than Alternatives B or NA

21 47 **Fauna--"Reserved"? Land Use--"Reserved"?**

The information needed for the discussion was not available at the time the Draft documents were published These discussions are included in the Final documents

21.48 **At this point I stopped keeping track of the missing references - they are absent as often as not.**

Missing references are an oversight on our part, for which we apologize They are included in the Final documents

21.49 **The section on "Fire" is mistakenly carried over from pg. 3-67.**

Thank you The correct Fire discussion has been included in the Final Plan documents

21.50 **Why are the South San Juan and Sangre de Cristo Wilderness Areas Class II Areas?**

It has to do with the language in the Wilderness Bill under which they were designated. Wildernesses included in the initial 1964 Bill are Class I All others designated in subsequent Bills are Class II

21 51 **Under Effects Common to All alternatives, there are several phrases that provide loopholes subject to abuse--see the paragraphs on salvage logging, hazard trees around recreational sites, and timber harvest with regard to reaching "desired conditions within the range of natural variability."**

I am not suggesting that all cutting is inappropriate. There are cases such as reduction of fuel loads where it is necessary. I am wary of "other vegetation management objectives" being used as an excuse for commercial abuse, i.e , highgrading a stand of its big trees under the guise of fire management.

Your concern is noted We have tried to eliminate anything that might be construed a "loophole."

We need to build a case for some level of trust FS employees are, for the most part, a very professional, honest group While an absolute guarantee is impossible, it would be

very disappointing to find anyone "highgrading" a stand for the purposes of commercial timber production We stand by the integrity of our organization

These are the 1990s, not the 1960s When we say our objectives are healthy forests and ecosystems or the protection of biological diversity, then that's what they are

21.52 **Pg. 3-163 Using the availability of fuelwood and post/poles as an argument for increased road construction and timber harvest is a bit egregious. Accommodating local needs does not require large-scale commercial operations.**

Local residents would disagree We disagree with your implication the statement on pg 3-163 is merely that firewood and posts/poles are a by-product of large commercial sales This is a statement of fact and is not intended as, or used for, a justification to build roads

21.53 **What is the Wilderness Implementation Schedule (action plan)?**

It is the plan for managing the Wilderness It covers all human activities that occur in Wilderness

21.54 **III-12 15. I am not comfortable with the statement that "Exceptions may be made where resource management objectives or special resource considerations require earlier harvest." This is too ambiguous.**

Our experience is that these conditions sometimes exist It is difficult if not impossible to make an all-inclusive list of them These are exceptions that would have to be identified in an environmental document, which would include the opportunity for public comment before a decision to act can be made

21.55 **Pg. III-15 "Control natural insect and disease outbreaks...outside of Wilderness." Are there any legal issues here?**

All Forest management activities are required to be in conformance with applicable laws and regulations

21.56 **Pg. IV-10 Most of the Prescriptions for Core Areas and Core Restoration Areas are great--if only the RGNF would adopt this direction of management into the Plan.**

These Prescriptions were modeled in Alternative F, which used the concept of "island biogeography " Our analysis leads us to the conclusion that this concept is not applicable in this area

Instead, we have opted to employ the concept of "species dispersal " We believe that the Backcountry and other Prescriptions identified in the Final Plan resolve the same concerns

21 57 **Chapter V One of my greatest concerns with the entire Forest Plan is that any Monitoring and Evaluation Strategy depends on the ability of the Forest to secure the necessary resources, both people with the requisite skills as well as the required budget, to carry out the Strategy. Timber sales, grazing allotments, recreational impacts, and a myriad of other activities that occur on the Forest must be monitored, evaluated, and placed into a context of adaptive management. Without a guarantee that this will take place, the best of plans is worthless.**

We share your concerns and agree with your comment Please see Chapter 5 of the Final Forest Plan The RGNF is committed to fulfilling the monitoring strategy identified in that chapter

21.58 **Garcia (1993). Not in references.**

Thank You

21.59 **From the top down, within the FS, I note "lack of funds" given as reason for everything from not raising the road level for a short distance, to the reason grazing permits allotments and timber sales are not more closely monitored. Yet the new "vault toilet" and picnic area at the Rawley Mine must, by conservative estimate, have cost at least $50,000. .**

It seems hypocritical for the FS to profess to be biasing the DEIS on the '90 census estimate of 2% growth in this area for the next 2 decades! Obviously greatly increased use of the RGNF is being predicted and promoted by the FS in the Bonanza Area. Yet sufficient funds are not being allocated for forest side scientific study and inventory on which to base management practices.

It is a fact that National Forest budgets are declining Money may be spent in some areas of which you might not approve Recreation facilities are generally built where large numbers of people are either using a site or are expected to use a site The facilities are for the protection of resources

Use figures and projections of use cited in the Draft Plan documents have been reviewed and, we feel, better explained The FS is not promoting use or development in any particular area of the Forest over another (See also Response Pol- 13)

21.60 **Another problem is a snowmobiler can travel a much greater distance than a skier. Is there a way to separate snowmobilers and skiers on the National Forest?**

In the Final Plan, snowmobiles are restricted from using some areas of the National Forest The most successful way to separate snowmobilers and skiers is through a negotiated agreement between them This does not necessarily need to involve the FS Also, there are many areas on the Forest where a skier can find solitude

21.61 **For whom are we to believe these alternatives were written? They are readily comprehensible to only two types of people the adamant timber purchaser, and the timber purchaser's adamant opponent For even the mildly informed reader the proposals appear to be propaganda which hopes to position the Forest somewhere in between the anticipated proposals of those who will pressure for pro-use at every issue and those who will pressure for conservation at every issue**

The alternatives were developed based on themes developed by public work groups The work groups were composed of people representing as many different points of view as possible. Alternative descriptions were written by Forest staff based on the alternative themes (See also the response to 21 18)

21.62 **. the Final Plan and its implementation will yield to whomever can and will apply the most pressure. Is this any way to manage a Forest? The FS itself seems to have reverted to a reactionary role, content to react to the loudest most persistent voice or voices.**

Decisions in the Final Plan were based on the resolution of issues We looked for good ideas in public comments, regardless of the source, and built those into the Final Plan We feel good about the decisions that were made and the direction the Plan has taken You will have to be the judge of who or what we reacted to and whether that is good or bad.

21.63 **To my knowledge the entire RGNF has only one full-time biologist on staff. We have a new Ranger with extremely limited field accessibility and no local office in the Creede District; a Ranger shifted to the La Jara District. From whom and where will**

the biological knowledge for the biological management of the Forest emanate, especially during this planning process?

There are several biologists working on the San Juan - Rio Grande National Forests The *Planning staff has a full-time wildlife biologist, soils scientist, hydrologist, and ecologist* who are responsible for the biological components of the Forest Plan (A complete list of preparers is in the Appendices in the Final Environmental Impact Statement)

The Forest maintains a staffed office in Creede The Divide District Ranger works out of offices in Del Norte and Creede, is available by appointment, and would be happy to discuss problems in the field

21.64 **With regard to Recreation I think the key question that must be answered by the FS is HOW these activities will be managed/supervised.**

Many people are reached through the Forest Public Education program Still others are reached through various media routes Many people stop and visit our offices on their way to the Forest, and many others write letters requesting information before they come to the Forest Finally, we post information in campgrounds, at trailheads, in local-community visitor centers, and other key locations We also have people in the field

21.65 ***We prefer to see oil and gas leasing on private lands only.***

Oil and Gas Leasing is allowed on suitable and available lands within National Forest boundaries, by law Development Stipulations designed to protect Forest resources are applied to development

21.66 **Additionally, although the Draft Environmental Impact Statement [DEIS] clearly defines biodiversity and its three primary attributes, Alternative D as well as the other Alternatives are vague in addressing what constitutes its implementation. The public needs explicit and documented commitment to accept the credibility of a *proposed plan of action.***

The commitment to implement biological diversity is found in the Decision Notice, Forestwide Goals and Objectives, Desired Conditions, Management Area Prescriptions, Standards and Guidelines, and the Monitoring Plan

21.67 **It is also important that the "spirit" of the Plan be understood and followed by the USFS over the implementation period, regardless of any change in personnel during its life span.**

We have done our best to communicate the "spirit" of the Plan to the reader throughout

21.68 **The RGNF needs to place a high emphasis on the update of the RMRIS database Many aspects of the Forest Plan will rely on good, up-to-date data that are currently lacking.**

The Forest is committed to monitoring the Plan and incorporating that data into the RMRIS database Our goal is to have as up-to-date a database as possible over the life of this Forest Plan The RMRIS database was updated between the AMS and DEIS, and between DEIS and FEIS We are now using ARC acres to more accurately depict area We will continue to improve all our databases through yearly operations, monitoring and project analysis

21.69 **Consider changing, under the preferred Alternative, the Land Use Prescription of the Bristol Head Unit to a more protective designation. This could be changed to the way**

it is proposed under Alt. E. This would represent the only large block of forested land on the north side of the upper Rio Grande.

The majority of the Bristol Head Area you describe is allocated to the Backcountry Management Prescription in the Final Forest Plan (Please refer to the map of Alternative G [selected] for the boundaries of the area)

21.70 **Project site delineation should be well documented, and the planning unit boundaries should not be changed within the life span of the FPR This will keep the analysis relevant to the watershed during the next ten years. This is proposed in the draft Forest Plan Revision, and should be retained in the Final.**

Direction regarding your concern has not changed between the publication of the Draft Plan and the Final Forest Plan

21.71 **All timber harvest activities, planning units, and old-growth inventory should be incorporated into the GIS.**

All of these elements either have been incorporated into the GIS or will be, as inventory work is accomplished over the life of the Plan

21.72 **The annual evaluation report should include not just whether the Standards and Guidelines are still appropriate, but also if they are being implemented at the project level Past problems have been associated with the failure to comply with the Forest Standards and Guidelines. A plan to monitor/enforce the S&Gs should be included in this part of the Forest Plan.**

We believe the Monitoring Plan in Chapter 5 of the Forest Plan addresses your concern

21.73 **We support the needs outline in the Research and Information Needs Assessment section (page V-4) However, the Plan should provide much more detail as to how these will be accomplished, priorities, etc.**

We have revised the Monitoring Plan and we believe your concerns have been addressed

21.74 **This Forest Plan is highly biased and discriminatory against livestock grazing. Grazing is USED to maintain or enhance these "desired conditions." Ranchers are business people just like any other industry, and we stay in business against unbelievable odds, weather, disease, high costs, high taxes, low prices, not to mention the USFS and excessive government. We are not in business to be USED by the FS or the public to maintain or enhance the "desired conditions" of the RGNF or any other Forest.**

The FS gives equal consideration to all resource uses on the Forest, including range We regret any inference that ranchers are being used to maintain or enhance conditions on the ground We have the highest respect for ranchers

Correctly stated, we would be employing various "grazing systems" (working with ranchers) to maintain or enhance. etc Grazing domestic livestock on National Forest land is a privilege given ranchers via permit With the privilege come responsibilities that include maintenance or enhancement of "desired conditions" for the good of all Forest users--including ranchers

21.75 **Where were Forest Standards, Guidelines, and Desired Conditions developed for range and why do these apply only to livestock grazing and not wildlife?**

The initial set of Standards and Guidelines was taken from a Regional list, and then fine-tuned for local situations Wildlife grazing was taken into account as the S&Gs were fine-tuned. Desired Conditions were developed by the Interdisciplinary Planning Team as part of the Plan Revision process.

21.76 **We are not in business, nor do we have the time to do the job and take the responsibility of the FS in "managing allotments". We have more than full time jobs. It was never intended that the FS carry on "business as usual" by simply passing on its responsibilities and work of managing and monitoring, to the rancher.**

We disagree The rancher has the responsibility to manage the allotment according to the terms of the Allotment Management Plan Simply put, if the terms are not met, the permit will be revoked

21.77 **...more law enforcement individuals are needed. Also, all FS employees should be aware of the rules. Some have given information contrary to official regulations.**

We agree, more law enforcement officers are needed We make every effort to inform our employees of changes in rules and what the rules are Unfortunately, the wrong information is sometimes given out.

21.78 ***DEIS page 3-4 presents a list of items the "might change between the Draft EIS and the Final EIS." Will there be any public input regarding these issues?***

As we have said all along, the door is always open and we encourage people to come in and talk with us We expect the majority (if not all) of the changes made between the Draft and Final documents to be based on the comments received during the public-review-and-comment period We do not anticipate the need for any additional public-comment periods.

21.79 **...my dictionary defines a "goal" as an "end toward which effort is directed." The *PRLRMP, on page III-1, declares that "Achievement of goals is not mandatory and no* time frame for accomplishment is established."**

Our definition agrees with yours exactly It does not say anything about a specified period of time in which a Goal needs to be accomplished Accomplishment of some Goals identified in the Forest Plan is expected to occur well beyond the 10--15-year life of this Forest Plan

21.80 **Together we believe that you should review our individual comment letters, determine the nature and substance of those comments, and then engage our *organizations and representatives in dialog aimed through the local community* revising and perfecting alternatives that meet the statutory requirements for multiple-use management.**

Revisions of the draft planning documents have been made based on comments received during the public-review-and-comment period The range of alternatives, in our opinion, addresses the issues and concerns raised by the public (during the public-involvement process) and is well within the statutory requirements of NEPA and NFMA

21.81 **I am distressed that these maps were available to you and they already knew the four options or whatever it was, and yet four weeks ago when we were talking to representatives from the FS they said they didn't know what the options are exactly. They wouldn't tell us what they were...When I see that process, to me it speaks of a pre-set agenda. I think they are embarking on kind of a revision management plan to take the forest back to something that probably never existed**

Forest Plan Alternative maps for Management-Area Prescriptions and for Oil and Gas Leasing Alternatives were readily available to the public throughout the review-and-comment period We are concerned that this comment has the Forest Plan Revision and The Range Management Environmental Analysis confused.

The Revision of the Forest Plan is intended to guide management of the Forest into the future, rather than "back to something that probably never existed "

21.82 **...the ranger used to go around with the ranchers at the end of the season, and evaluate the range. That's what I think they ought to do. They ought to do that with the ranchers.**

Your concern is valid District Rangers and their staff are placing emphasis on spending time in the field with ranchers and others using Forest resources

21.83 **...and there are several Prescriptions, such as Wilderness Pristine, Wilderness Semi-Pristine that come back in and talk about when those permits become vacant, they will not be reissued and I believe that is a big contradiction.**

It is correct that some vacant allotments in Wilderness will not be reissued It is not correct that if an allotment in Wilderness is vacated, it will automatically not be reissued These decisions will be made on a case-by-case basis

21.84 **.. and I believe that the community and the local businesses need to have some kind of an idea about what economic activity that they can expect.**

We have revised the economic analysis of the Final Forest Plan to reflect more accurately the role that the Range program on the RGNF plays in local economies

21.85 **I mean they police us nearly every day. They go up and check our riparian water rights, check areas to see if cattle are there to have them dispersed upon the range. They ride our range numerously. I was taking care of the sheep country which is in the Creede area, and I had the head ranger come up and check me three times in ten days himself, personally. I accused him of harassment, and he never checked on me again, so there are some things we can do.**

FS personnel are responsible for Forest resources Range Allotments are part of the National Forest and may be visited periodically

21.86 **The other thing is all the people that had any type of special interest in going out and getting our range analysis on the FS side, if they belong to Cattle Free 93 or some other special interest group, I think they ought to be removed from that group who went out and did the analysis, because of their interest.**

Generally speaking, between 800 and 500, FS personnel are representatives of the USFS After 500, they are private citizens free to pursue their own interests, the same as anyone else FS employees are not allowed to let personal biases influence Forest management decisions

21 87 **Now if you look at the difference between the grazing and the Forest as far as the colors concerned then I'm sure that we'll hear the same old adage that, "Oh, you can run your cattle in these other areas There's no problem with that." But frankly, I don't believe them.**

The statement is true Very little of the Forest is allocated to Prescriptions that emphasize range uses Many of the Prescriptions applied in the Final Alternative do not preclude grazing, however

21.88 Well I'm here to say that forest has been here a long time. Mother Nature can take care of it a lot better than the FS can, and it's job security. That's what these maps are, I think, is job security, and I'm against it.

The FS has the responsibility to manage National Forest System lands Forest Plans are required by law *(National Environmental Policy Act, National Forest Management Act)* to review and revise Forest Plans every 10-15 years The RGNF Plan is being revised as stipulated by law

21.89 Point of fact, the part of forest management that calls for nurturing of the human spirit receives far less energy, care, and innovation in the DEIS than any of the other concerns. I see nothing other than "vista" impacts mentioned in either the Statement or the Summary.

We agree that National Forests are places where renewal of the human spirit can occur It is a difficult and somewhat sensitive subject to address The Forest is managed to provide a full array of opportunities for people to interact with the forest environment

Renewal of the human spirit is something that can occur as the result of many, if not all, of these interactions Therefore we would argue that the opportunity for renewal of the human spirit is present and accounted for in any of the Prescriptions applied in the Final Forest Plan

21.90 My initial reaction to the preferred alternative was that it is a classic result of compromise between the environmental community and the resource-exploitation camp, where neither side is happy with the result. I think that the timber harvest target for the preferred alternative is too high and is close to the amount targeted by the high-resource-use alternative.

The identification of the preferred alternative in the Draft documents is a legal requirement The preferred alternative is our best attempt at a compromise, and is a decision only for the 120 days of the comment period.

The ASQ in the preferred alternative is lower than that identified in two other alternatives We hope your review of the Final Plan will lead you to the conclusion that the comments we received were read and responded to Changes have occurred between the publication of the Draft and Final documents.

21.91 Can ecosystems remain intact, no matter how intense the level of disruption due to road building, timber harvest, grazing pressure, mineral extraction, and oil and gas exploration?

The principles of ecosystem management were applied to all alternatives, and our analysis indicated that all alternatives ensure the protection of biological diversity Some alternatives push the limits of biological systems farther than others

21.92 .. a comment about the promise that there would be no vote counting to determine the adopted course of action. If there is any common ground to be found with most of the local opinion, it is for the RGNF to remain the same. To me this means the curtailment of all planned developments or expansion of existing projects.

As we have stated all through the revision process, the public-comment period is not a vote Rather, we are looking for and will adopt good ideas that translate into sound Forest management The No Action option is a strong local favorite amongst the local communities No Action does not mean that nothing happens it means, instead, that no change from the way the Forest has been managed will occur

21.93 **Land management decisions should be based on the long-term sustainability of the resource, whatever it might be, and the primary concern should be the retention of naturalness, to preserve a national public heritage that is irreplaceable, and irreparable if damaged.**

We agree

21 94 **The value of Wilderness has long been acknowledged, and should not be overly criticized because of its popularity. The overuse can be attributed to the fact that there have traditionally been few Wilderness Areas to choose from Roadless areas offer the same experience, it's true, but their long-term protection has been at the mercy of changing FS administrations. There can be no denial that thousands of roadless areas have been lost in this manner.**

The preferred Alternative (D) slates the entry of 13 roadless areas, totaling 137, 374 acres[1] How can this be better protection than designated Wilderness?

We don't criticize or condemn the Wilderness system It is a fact that some Wildernesses, near large population centers, are being "loved to death " We would argue that this has to do more with proximity of people to Wilderness than with the number of Wildernesses there are to choose from

Alternative D does identify 13 unroaded areas for entry over the long term According to Table 3-73, Alternative D also puts better than 350,000 acres into Backcountry This is not Wilderness, true, but these areas will not be developed, either

21.95 **What is the reasoning for using Management Prescription 5.11 for the Hansens Mill - Trujillo Creek area, and what actions are intended?**

This is a mix of forested land and meadows The area is roaded, it has been managed in the past, and it contains grazing allotments It is also a popular recreation and hunting area

The General Forest and Intermingled Rangeland Prescription accommodates these activities without emphasizing any one resource use over another. The area will continue to be used for grazing, some timber management is likely, and recreation uses are expected to continue

21.96 **...the FS must take into account lingering impacts from past abuses like clearcuts and the building of "non-system" roads across fragile terrain.**

The FS is required to discuss the cumulative effects of past activities, activities in adjacent ownership, and the effects of unplanned activities such as the development of "non-system" roads during hunting seasons The discussions dealing with Environmental Consequences in Chapter III of the FEIS include cumulative impacts

21.97 **If the FS planned for slow growth but the reality is fast growth, doesn't this call into question the management decisions included in the preferred alternative?**

Projected levels of population growth have been factored into all alternatives, including the selected alternative Please refer to the Socioeconomic discussion in Chapter III of the FEIS

21.98 **At this stage of the planning process, the FS should not allow any additional alternatives to be introduced.**

With the exception of the selected alternative, which is a hybrid of two existing alternatives, no new alternatives have been introduced or developed

21.99 **By the way, I think the DEIS misrepresents Alternative F when it comes to grazing. On page 3-175, the DEIS states Alternative F could close the Forest to grazing. This is incorrect.**

We disagree The statement says that the alternative has the "potential to close the Forest to grazing because of low allowable use levels " The statement is correct the potential exists.

21.100 **We at Hermit Lakes would be willing to participate in maintenance and monitoring activities to alleviate some of the FS's cost in administering a reasonable recreational-access plan in our area.**

Thank you, we appreciate your offer and look forward to the opportunity to work with you as the Final Forest Plan is implemented

21.101 **The "Desired Conditions" statement was probably thrust upon you from elsewhere. However it contains several fairy tales 1) "Grazing is used to maintain or enhance the desired conditions." That is probably impossible. 2) "The amount, arrangement and continuity of live and/or dead material...will be consistent with historic fire regimes and land uses." Whose history are we talking about here? Fire frequency regimes in the past century have been kept below levels necessary to maintain the health and composition of this area. 3) "Healthy soils will provide .minerals .." the statement is an oxymoron. There are no extraction procedures that do not produce at least temporary toxic conditions and very unhealthy soils.**

1) We disagree Grazing techniques have been successfully employed to influence vegetative composition in areas that are considered desirable 2) Any reference to fire history is specific to the RGNF and in some cases dates back well beyond 100 years 3) We disagree

21.102 **A large flaw in this analysis is an implicit (and sometimes explicit) assumption that the Forest exists in some type of quasi-steady state.**

Your conclusion is incorrect A basic premise of Forest management (and the analysis presented) is that the Forest exists in a constant state of change

21.103 **The BLM submitted extensive and detailed scoping comments to the RGNF on December 3, 1993 Following review of the DRFP and DEIS, it is our belief that very few of our concerns and suggestions were adequately considered and addressed in these documents. Consequently, we request that all 24 pages of our December 3, 1993 comments be incorporated by reference as part of these comments.**

We contend that the comments expressed in your December 3, 1993 letter were adequately addressed in the Plan As a courtesy, the Forest Plan Interdisciplinary Team is responding to those comments You should note, however, that according to the Office of General Counsel, it is your responsibility to send a copy of the document you wish incorporated, and that you cite the comment you wish to be addressed, and why

21.104 **The Final Revised RGNF Plan must contain improved, enforceable Standards and a strengthening of Forestwide environmental review. We urge the RGNF and administrators in Region 2 to step back, reassess the agency's response to its statutory mandates, and demonstrate in the Final RGNF Revised Forest Plan its commitment to the excellent stewardship envisioned by Congress in passing NFMA and NEPA.**

We believe that the Final Revised Forest Land and Resource Management Plan for the RGNF addresses your concerns

21 105 **Implications of Budget Constraints Not Fully Disclosed in the DRFP...whereby the actual budget allocated to a Forest falls short of that necessary to implement the Plan in full. At the very least, there should be some form of public disclosure, comment, and accountability (including a supplemental EIS) associated with the distribution of funds insufficient to cover all planned activities.**

We disagree We recognize that one of the significant shortcomings of the 1985 Plan is that it is based on a full level of funding, which we have never received

All alternatives in the Draft documents show the FULL budget required to implement the Plan fully, and the EXPERIENCED budget which is based on historical funding levels Each of these scenarios portrays associated outputs and displays the environmental consequences of each

We believe that this is a realistic portrayal of the budget scenario, and that your concern for disclosure, comment, and accountability has been met within the framework of the preparation of this Forest Plan and accompanying EIS A supplemental EIS would be a waste of time at taxpayer expense

21.106 **Our organization and other groups have developed useful scientific bibliographies on a number of key Forest issues and submitted this information, as part of our comments, to the RGNF staff. We expect all substantive information to be reviewed and considered even if it requires a delay in the completion and publication of the Final RGNF Revised Plan.**

The tenor of your comment would lead to the conclusion that a delay in the completion of the Final Forest Plan was your objective for submitting the bibliographies, rather than concern for sound application of relevant scientific literature The RGNF Planning Staff has gathered all of the literature cited and reviewed it for relevance to this planning effort, as we said we would

Relevant information has been incorporated into the analysis without any delay in the publication of the Final Plan The literature review and the results of it are part of the Planning Record which is on file at the Forest Supervisors Office in Monte Vista, Colorado We would like to thank your organization for assisting us in gathering the literature citations in your comments

21.107 **None of the alternatives in the DRFP identify or contain a discussion related to thresholds of acceptable resource use and exploitation.**

Discussion of such "thresholds" is not required by NEPA or NFMA

21.108 **None of the alternatives fully and adequately focuses on restoration activities that are required to restore and enhance degraded lands and those that have been identified as currently unsuitable for particular historic uses.**

All alternatives identify areas of the Forest in need of restoration, for instance, Watersheds of Concern are listed in the Cumulative Impacts discussion on 3-___

21.109 **Failure to adequately and fully consider the merits of Alternative F The Core-buffer-core model used in Alternative F would apply to a broad spectrum of situations including, most certainly, all manner of forested landscapes, including those in the southern Rockies. Please refer to our Conservation Biology Bibliography**

and explain in more detail the degree to which you are including these principles in the selection of a final preferred alternative

We disagree Alternative F (an FS alternative) was modeled and analyzed equally with the other alternatives A review of the literature pertaining to the application of the core-buffer-corridor concept indicates that it is most applicable to large areas that have been heavily fragmented by human activity.

The RGNF is a fragmented Forest, but the fragmentation is more a result of vegetative composition and distribution than human disturbance We agree that areas of the Forest are heavily fragmented from past management, and merit concern These areas are small, however, when viewed in the context of the entire Forest, and do not justify the application of the core-reserve concept

Our literature review indicates that the concept of species dispersal is more appropriate and applicable to the southern Rockies, and is the approach used in the selected alternative There are many similarities between the land allocations in the selected alternative and Alternative F The distribution of Backcountry areas, for instance, and the commitment to provide cover for species to migrate between them is very similar to the core-corridor concept We believe your concerns are addressed

21.110 **The FS's management philosophy has changed to one of managing multiple uses within the context of a broad assessment of all resource, social, and economic values known as ecosystem management. Although the term "ecosystem management" has a lofty sound, the FS has still been unable to articulate a clear, concise, understandable, and consistent explanation of the application of ecosystem management.**

The statutory purpose of the National Forests described in the Organic Administration Act, the Multiple-Use Sustained Yield Act, the Forest and Range Land Renewable Resources Planning Act, and the National Forest Management Act remains the same, "To improve and protect the forest within the boundaries, or for the purpose of securing favorable conditions of water flows, and to furnish a continuous supply of timber for the use and necessities of the citizens of the United States " Ecosystem management might be a tool to carry out the mission of a National Forest, but it alone is not the mission of the National Forest.

Neither is furnishing "a continuous supply of timber for the use and necessities of the citizens of the United States" the mission of the FS It is, rather, a facet of our mission

All the laws you cite contain language that stipulates the application of the principles of ecosystem management The mission of the FS is very succinctly stated in the motto "Caring for the Land " (protection of soil, water, biological diversity) " and Serving the People" (resource development). The motto--as well as the law--places the care of land ahead of the needs of people

21.111 **It is implied throughout the analysis and in the description of Alternative D that a reduction in harvesting provides protection and diversity for the natural systems. This is a fundamental flaw in the RGNF's planning process that must be corrected; the economic and social sustainability of human communities must be addressed.**

There is ample evidence around the world that biological or ecological sustainability is much more likely to be achieved when human needs can be met. Preservation over management is a prescription for disaster The Forest will continue to evolve into a less diverse structure beyond the historical peak of late-successional stand structure.

We disagree The implication (and the result of our analysis) is that harvesting timber within reasonable limits provides for the maintenance of diversity in natural systems All alternatives address and disclose effects on the economic and social sustainability of human communities We believe that human needs and biological needs have been provided for We do agree that the Forest will continue to evolve

21.112 **The Range of Natural Variability [RNV] report addresses a concern for unhealthy conditions, yet the RGNF has failed to respond to its own report The RGNF has not recognized that forest health, diversity, productivity, and aspen are in decline. Conditions for catastrophic fire are on the increase, and insect and disease populations are increasing or the conditions exist for increase. The major factors of forest change have not been recognized, and therefore the real solutions to providing for biological diversity have not been described, analyzed, or evaluated.**

We do not agree The entire DEIS speaks to the question of forest health Factors of change have been identified (natural and human-caused) and the effects described, analyzed, and evaluated

Your reference to the "real solutions to providing for biological diversity" indicates some very fundamental disagreements on factors of forest change and solutions for providing for biological diversity We believe the FEIS adequately describes both

21.113 **The Code of Federal Regulations 36 CFR 219.12(f)(7) states that "At least one alternative shall reflect the current level of goods and services provided by the unit ." and this alternative shall be deemed the "no action alternative." The no action alternative should have an Annual Sale Quantity (ASQ) of 33 mmbf.**

The regulation also states, "The interdisciplinary team shall formulate a broad range of reasonable alternatives. „to provide an adequate basis for identifying the alternative that comes nearest to maximizing net public benefits, consistent with the resource integration and management requirements..." There should be no question as to the development of an alternative that would provide 33 MMBF or more for the continuation of the wood products industry in the SLV.

The regulation you cite states, "At least one alternative shall reflect the current level of goods and services provided by the unit and the most likely amount of goods and services expected to be provided in the future if current management direction continues" (emphasis added) The regulation says nothing about any specified level of outputs The No Action alternative correctly portrays current management and "the most likely amount of goods and services expected"--that is, 22 0 mmbf.

21.114 **[Where is a] delineation of structural stage/structural class in the Forest Plan?**

The information is difficult to display in a meaningful way, and so is not included in the Plan The information is on file at the Forest Headquarters in Monte Vista, Colorado

21.115 **Follow the planning regulations to build a better Plan.**

Planning regulations have been strictly adhered to in all phases of the development of the Draft and Final Revised Forest Plan.

21.116 **Forest Health Alternative See Section B for the details of this alternative and a description. A forest health alternative as the basis of a healthy forest is required.**

The RGNF has made the case that the Forest is changed. It can only be represented by an alternative with Standards and Guidelines that match.

All the alternatives respond to your concern about forest health We are unaware of the alternative you describe, and unable to find any requirement in the regulations for it All alternatives meet the legal and regulatory requirements guiding the development of a Forest Plan

21.117 **As can be seen in the review by Alexander, "The alternatives do not consider what *the variances would be under different Standards and Guidelines* What varies between alternatives is how much land gets applied to which prescription. There are a great many prescriptions that were not applied and a great amount of variation in Standards and Guidelines that were not considered." There are many useful combinations**

We're not aware of any regulatory requirement that stipulates the variation of Standards and Guidelines, nor have we found one The Prescriptions were selected from a Regional "menu" that was developed because of the wide range of conditions that exist around the Region

It is common sense that Standards and Guidelines for a Prescription should be the same wherever it is applied. Variation might occur on a site-specific basis, but this would be an exception rather than the rule

21.118 **There is no reference to the planning requirement of including Special Interest Areas (SIAs) in the Revision. The DEIS does not include any reference to the legal framework to include SIAs in the Revision. There may be interest in providing special management for some of these areas but it appears there is an attempt, without specific direction, to administratively set aside land areas without adequate review.**

There isn't sufficient disclosure of information in the DEIS to develop a conclusion as to the value of these areas. The public should be entitled to a site-by-site disclosure *for each proposal in the Forest Plan Revision.*

Special Interest Areas are nothing new and were, in fact, included in the land-allocation process in the first round of Forest Plans These areas fall into the category of allocations that may be approved by the Regional Forester, and are included in the Forest Plan Revision under that authority

It isn't clear what specific disclosures you're concerned about The FEIS includes a table showing tentatively suitable lands within SIAs The trade-off appears to be minimal for what is gained

21.119 **The Forestwide Objectives do not meet the requirements of CFR 219.11, which states, "The forest plan shall contain the following...(b) Forest multiple-use goals and objectives that include a description of the desired future condition of the forest or grassland and an identification of the quantities of goods and services that are expected to be produced or provided during the RPA planning periods."**

Forestwide Desired Conditions are described in Chapter One of the Final Plan, and the Forestwide Goals and Objectives are described in Chapter Two Quantities of goods and services are described for each alternative in the Final Environmental Impact Statement

We believe the intent of 219 11 is met in that the Forest Plan and accompanying EIS contain all of the information required, in the section of the document where it makes the *most sense to describe it*

21.120 **The Objectives in Chapter Two of the Draft Forest Plan do not meet the definition for Objectives contained in the Introduction section of Chapter Two, i.e , "Objectives**

identify quantities of items within the planning framework. Objectives concisely describe specific, measurable, desired results or conditions that are action-oriented."

The Objectives in Chapter Two do not identify quantities of items with the planning time frame. They do not concisely describe specific, measurable, desired results or conditions, and they are not action-oriented. In fact, they are rather meaningless to either the line officers charged with implementing the Plan or to the public. The Objectives must be rewritten to meet the requirement in the forest planning regulations and the Plan definition of Objectives.

We disagree The statements in Chapter Two describe the Objective They do not repeat legal, Manual, or Handbook requirements that are in place and must be followed Case in point Objective 1 1- "Protect the environment from air pollution to at least the degree that legal authorities require " The law specifies quantifiable, measurable limits of pollutants The FS is required to meet the law

It is interesting that you conclude that the objectives are meaningless to line officers The entire Draft Plan was reviewed by line officers and subsequently approved

21.121 **Pg 2-4 - Biological Diversity The description of the current Plan (Alternative NA) is very negative, the analysis done for the current Plan was state-of-the-art, and the implication that Alternative NA would not "ensure long-term sustainability (i.e., maintaining site productivity, biological diversity, and natural processes) of the Forest is not defensible.**

There are two pages of Standards and Guidelines dealing with diversity in the existing Plan and the DEIS. Those S&Gs do very little to promote diversity, do not treat aspen, and recommend use of "reference landscapes," a concept with which we disagree.

The description of the current Plan is an honest depiction of the situation It is part of the reason the current Plan is being revised The analysis done for the current Plan was state-of-the-art in 1985 There are many analytical tools available now that were not available then

Without knowing your specific concerns about "two pages of Standards and Guidelines," it is impossible to respond. We would argue that the Final Forest Plan promotes diversity, treats aspen, and uses current analytical methods

Change is often difficult to accept, and we agree that the concept of reference landscapes is new, also that it is very responsive to current concerns We feel that the concept provides a rational, logical methodology upon which decisions to manage vegetation can be based with much more reliability than in the past

21.122 **Pg. 2-17 - Biological diversity functions through a complex set of interactions, heavily influenced by the natural forces of fire, insects, and disease. Man's decisions (primarily fire suppression) have altered the course of these forces, thus biological diversity has changed. We assume this is why the FS has biodiversity as the principal revision topic.**

The RGNF has presented criteria to measure their Objective to provide sustainable ecosystems for "key components of sustainability." We believe the additional criterion of "human influences" should be included. A "key biodiversity attribute" would be Forest Health.

We agree with your explanation of biological diversity and how it functions Human decisions have played an important role in biological processes Biological diversity is one

of the Revision topics, rather than the principal one Revision Topics are equally important. The rationale for including biological diversity as a Revision Topic is explained in detail in Chapter 1 (Purpose, Need, and Significant Issues) in the FEIS

21.123 **We suggest the following organizational change in Chapter 3 to reflect the significance of forest health in action development and to avoid confusion**

All the ecological resources are under the heading Biodiversity Assessment, with the addition of Forest Insect and Disease, Fire and Fuels Management, and Wildlife. Under a section titled Physical Resources, add Air, Water, Soil, and Minerals. There should be a section on the "set aside" management areas RNAs, Wilderness, Unroaded, Wild and Scenic Rivers, SIAs, and Heritage Resources; a section to include Recreation and Travel Management, and the Social discussion; followed by the final Consequences discussion.

The organizational format was developed by the Regional Office for consistency amongst Forest Plans The format is based on planning regulations and what is required in a Forest Plan

Your comment regarding "set aside" management areas would lead to the conclusion that you see only one use for National Forests timber production We disagree Land allocations for RNAs, Wilderness, etc , are just as valid and equally important as Forest products

21.124 **Pg. 3-43 - It appears inappropriate to use such simple analogies as "chocolate chip cookies," when dealing with the seriousness of the technical subject matter.**

The FS is often criticized for using technical terms and confusing scientific jargon The use of the analogy was merely an attempt to simplify a technical discussion to the point that the layperson can easily understand it

21.125 **DEIS pg. 3-74 There is [the statement] that "There is no attempt to try and determine if that vegetation pattern will change..." and reference to LTA sections for discussions of successional changes. Looking back on the LTA discussions leaves the reviewer in doubt as to the definition of "change " The LTA sections do not seem to cover this point. A prediction of change seems very important. The prediction should be based on expert scientific evidence.**

More detailed descriptions of changes in vegetative composition have been included for each LTA

21.126 **DEIS pg. 3-163 "..Human uses subordinate to ecosystems process." We are confused by this statement Does this mean the RGNF sees no action as the best medicine for ecosystem improvement?**

No The sentence reads "Alternatives A and F assume that human uses will be subordinate to ecosystem processes, hence, the projected shortage of these products would be alleviated only through vegetative manipulation tied to other forest objectives "

This means that these alternatives are framed around the idea that ecosystem needs are always placed ahead of human use in these alternatives Shortages of logs, for instance, would be alleviated through other Forest Objectives a wildlife improvement project, for instance

21.127 **Watershed Risk Assessment We don't disagree with an assessment of disturbances, but we do disagree with the RGNF's lack of connection between disturbances and**

on-the-ground effects. There is simply no basis for the identification of "watersheds of concern" or "watersheds of highest concern."

We are especially concerned that the Forest made no attempt to correlate historic levels of disturbance with current conditions, i.e., more fires, and larger fires historically which would have "disturbed" much larger areas of the Forest than have timber harvest or other management activities.

The watersheds are identified because there are concerns about conditions that exist in each of them Without specific references, it is impossible to respond to your concern All analysis relative to the watersheds identified is disclosed in the FEIS

21.128 **We are unaware that the Forest Supervisor decided it would be unwise to allow more surface disturbance in watersheds of concern until more study has been done. This decision should be documented in the planning for public review and comment.**

The publication of the Draft Forest Plan and EIS, and the public-review-and-comment period, respond to your concern

21.129 **Figures 3-54 through 3-57 which display Relative Risk between Alternatives are misleading. While they purport to show the range of relative risk, they do not clearly display that the risk from any of the alternatives is very minor since all projects in all alternatives will have to comply with the same Forest Plan Standards and Guidelines. Consequently, even the Alternatives described as having the "Most Risk" will meet all requirements of the environmental laws of the United States. We recommend these figures be deleted.**

The figures are included to meet the planning requirement of comparing the alternatives We agree with your statement about the application of Standards and Guidelines Where we disagree is that any time humans attempt something, there is a "risk" of failure. The figures accurately portray Relative Risk between the alternatives and are included in the FEIS

21.130 **Draft Plan Preface pg. 5 (a) Refers to Forest Plan Goals and Objectives, however, the Forest Plan only contains Objectives.**

The two are so close in definition that we combined them Webster's defines "goal" as "The objective toward which an endeavor is directed" and "objective" as "Something worked toward or aspired to GOAL " Combining the two in order to simplify the document makes good sense

21.131 **Preface pg. 5 (b) states, "The determination of whether an individual project is consistent with the Forest Plan shall be based on whether the project follows Forestwide and Management-Area Standards," and (d) states, "Plan Objectives.. should not be used in the consistency determination."**

We disagree. In our view, the measure of consistency should include whether or not the project is consistent with Forest Plan Objectives and the Desired Future Condition, in addition to Standards. The Standards are written primarily as constraints and do not provide the vision of what the Forest Plan is designed to accomplish.

The Standards would more accurately be described as descriptions of how the Forest intends to accomplish the Desired Future Condition and the Objectives. Project plans and annual programs must be compared to the Desired Future Condition and to the Forest Plan Objectives in order to measure compliance with the intent of the plan.

The statements in the Preface are consistent with national and Regional direction for Forest Plans We disagree with your characterization of Standards Standards can be viewed as constraints if your objective is to take more than the Standards allow. Standards are written as resource protection measures and are an accurate measure of Forest Plan consistency.

21 132 **Public Involvement It is clear from the statement that public involvement's intention is to "explain" to others what the FS will do This does not achieve the objective for a collaborative process.**

The intent of public involvement, through this planning process and any in the future, will continue to be working with the public, toward resolution of issues We believe this is consistent with the concept of collaborative planning

21.133 **Preface pg. 9 We are concerned about the statement, "Nothing precludes the development of additional minimum resource management direction whenever appropriate." We completely disagree with the implication that the FS Directives System can be revised and simply override the RGNF. Conflicts between the Directives System and the Forest Plan can be resolved only through an amendment to the Forest Plan.**

We agree The statement is correct Nothing will preclude the development of additional *direction whenever appropriate The additional direction would have to be incorporated* into the Plan via an amendment

21.134 **Preface pg. 11 "Tourism is a main source of income." While tourism is important, Colorado's most important sector is Agriculture. Prior to having a good recreation/tourism industry, the basic industrial sector must be well developed.**

The tourism discussion in this section is out of context. The Forest's real contribution is to the wood products and grazing industrial sector. This is not mentioned, and is also a "distinctive role."

Taken in the context of an overview, the statement is correct Many individuals and organizations would argue that their primary interest is the most important The statement is one of fact, not an argument of the importance of one resource over another

21.135 **Preface pg 12 Dispersed Recreation. "Outdoor recreation is the primary resource on the RGNF. Management emphasis is to feature and perpetuate undeveloped dispersed recreation opportunities."**

This statement follows the consistent theme of the revision process, and is an underlying flaw throughout the entire process which leads to the wrong conclusions. In the data collection or any other substantiated analysis, where does it show that the RGNF contributes directly to the recreation sector? The RGNF is the backdrop to this industry, and market studies would have determined the proper role of the RGNF in recreation.

Recreation and tourism play an important role in the economy of the San Luis Valley Table 3-104, RGNF Contributions to the Local Economy, shows that approximately 46% of the RGNF contribution to the local economy is from NF recreation, fish, and wildlife The statement you reference is based on fact and is correct

21.136 **Timber Resources The DFC should contain an affirmative statement about the affect timber harvest in the forest Timber harvest should not be contingent on maintaining or enhancing the biological diversity of those forested areas.**

First of all, biological diversity is not the over-arching goal of forest management on the RGNF Secondly, the statements suggest that biological diversity can be created or destroyed--not so! The RGNF will have biological diversity whether the entire forest burns, is clearcut or remains exactly as it is today. The biological diversity will be different in each of these scenarios, but there will be biological diversity.

How can timber harvest be contingent on "maintaining or enhancing the biological diversity" when there is no way of describing when or how biological diversity is achieved?

We believe the DFC statement is affirmative with regard to timber production The desired condition is that the Forest be capable of "sustaining timber harvesting that provides wood products for humankind while maintaining or enhancing the biological diversity of those forested areas "

We would argue that this is not a statement biased against timber harvest Rather, it argues for the importance of it We would also point out that National Forests are not managed solely for the benefit of the wood products industry.

21.137 **Why would you want harvest operations to mimic naturally occurring disturbance events or processes? Those events or processes include the following (RNV, Appendix A Plan)**

- **"Sporadic crown fires and/or higher-intensity surface fires that kill most, but not all, vegetation "**

- **"Cover medium to large areas (1,000 to 10,000 acres)."**

- **"Many 100-to-150-year-old burns are still not showing any indications of conifer or aspen reestablishment and are maintaining a grass cover."**

We suggest rewording, "while protecting those resources for future generations," to, "on a sustainable basis."

We have reworded the section in order to clarify the intent. Timber harvest is viewed by a significant portion of the American public as bad This is based on how the timber harvest looks

Natural disturbances also include small-scale occurrences like dead individual trees, small patches of blown-down trees, and bug kill If we simulate those types of occurrences and the disturbances appear to "belong" there, then it would follow that harvest activities would be more acceptable to members of the public

We believe that protecting the resources for future generations is essentially the same as "on a sustainable basis " We opt for the original wording.

21.138 **Pg. I-2, Fire We would not advocate fuel profiles "consistent with historic fire regimes and land uses" in those portions of the forest where fuels naturally built to very high levels and consequently set the stage for large, high-intensity fires**

Neither would we. This is a Desired Condition statement, and we would like to achieve it in areas of the Forest where it might not exist.

21.139 **Pg. II-7, 8.4 "Help diversify rural economies" means to participate in the areas where the RGNF can make a contribution. That is with trees, the natural resources that the FS is commissioned to manage.**

We believe that diversified rural economies are stronger over the long term than economies dependent on a single resource The FS is commissioned to manage National Forests and all the resources they contain That is more than trees

21.140 **We do not agree with "provide for the perpetuation of natural landscape diversity." There is no reason for this Objective on suitable lands.**

We are frankly baffled by why only MAs 5.11 and 5.13 have this included in the DFC statement. Frankly it appears to have been inserted into only these two Management Areas as a constraint on timber harvest.

The Objective is intended to ensure, through the perpetuation of natural-landscape diversity, the sustainability of harvest opportunities over the long term Your second point is a good one, this Objective is applicable to all MA's

21 141 **Many of the Desired Conditions are written like Standards and Guidelines, i.e., "Provide for wildlife habitat dispersion . Provide for restoration opportunities ." etc. We don't understand how these Desired Condition statements will be used in project planning since they are not Standards and Guidelines, and therefore are not necessary for compliance with the Forest Plan.**

Further, these Desired Conditions are so vague that they are virtually meaningless, or even worse, leave the Forest open to appeal and/or litigation over their interpretation. For example, what does, "Provide for adequate old growth components..." mean, and how will project ID Teams, or the public, interpret that statement?

We agree that there are some similarities in the way Standards and Guidelines and Desired Conditions are written Project plans will be designed so that the end result contributes to the development of the Desired Condition over time

"Provide for adequate old growth" means what it says ID teams will use Guideline 1, Management-Area Prescriptions 5 11 and 5 13 to determine how much and where an adequate old-growth component needs to be within a landscape Desired Conditions are straightforward statements that guide land managers, project leaders, and the public over time

21.142 **We strongly recommend that the Forest Plan define Diversity Units or Analysis Areas geographically as part of the Plan revision.**

The Districts do project planning at the landscape scale, and these areas vary in size Generally they are delineated around one or more watersheds They are not delineated in the Forest Plan

21.143 **Pg IV-35 The Desired Future Condition for 5.13 should clearly articulate a vision of a managed forest Specifically, the DFC should contain statements such as**

- **"This Management Area is accessed by a road system adequate for long-term management."**
- **"This Management Area has the appearance of a managed forest."**
- **"The primary purpose of this Management Area is the production of wood fiber, and operational restrictions and mitigation measures for other resources will be limited to those which are absolutely essential."**

The Desired Condition statements for MA 5 13 clearly articulate the role this Prescription plays in Forest management. We appreciate your concerns, but other resource values

cannot be sacrificed for the sole purpose of timber harvest Nor is the vision for this management area one of a "tree farm "

Management emphasis has clearly been placed on forest products, however appropriate mitigation measures will be applied and all resources will be protected

21.144 **In all these alternatives the suitable acres should be as much or more than the current No Action Alternative If all the resources are compared in an equitable fashion financial and economic analysis, and true benefits; then the Forest Products Management Prescription and the other Prescriptions that allow for harvesting, would increase acreage of harvesting and actually achieve the true alternative descriptions.**

There is no requirement in the planning regulations that stipulates that suitable land has to be or should be greater than that in the No Action alternative That would front-load all alternatives with more or less predetermined targets, and makes no sense. We do not agree that the only alternative emphasis that benefits the local economy is forest products

21.145 **The study seems to fall short of the expected content of the requirement. The study deals only with the sawtimber commodity. Why isn't there similar studies for the other resources commodities?**

Earlier in these comments it was questioned why you did not recognize the potential of the aspen market or the markets changes in the renewable resource demands in the United States The study does nothing more than reflect your own records of what has occurred over a period of 10 years ending in 1991.

Included in the study is a prediction of what would be the affects if the supply was reduced. A demand and supply study should as a minimum include the basic economics of the relationship between supply and demand based on various product values.

The study fully met the requirements the contractor was asked to fulfill It purposely targeted the sawtimber commodity in response to some very serious concerns expressed by the timber industry

The study did not specifically address aspen because traditionally there has been no demand for aspen The Plan is flexible in this respect and can accommodate demand for aspen (or other forest products) if/when it ever occurs

21.146 **There is one additional reason for requesting the RGNF planning staff to issue more specific management options. The public has a right to know if the options are sustainable at a Forest level. Will they provide nondeclining outputs of multiple resources? This question of sustainability at the Forest level cannot be handled by ID teams on a timber-sale-by-timber-sale basis**

The Forest Plan alternatives are modeled using a full range of silvicultural prescriptions that include (directly or indirectly) the information you are concerned about The document is programmatic in scope and analysis, and is of necessity done at that level Any site-specific analysis will have to be done at the landscape or project level

21.147 **Under the Freedom of Information Act, a request was made to the RGNF for the FORPLAN model used for Benchmark Analysis. No model was sent, although it is stated in the AMS that three models were produced for this purpose. If these models exist the Forest is in violation of the Freedom of Information Act for not providing them in response to an official request. They should have been retained as directed by records-retention regulations. If they were not retained there is a violation.**

It is unfortunate this information was not sent as there is not a method to determine whether the benchmarks were done according to regulation. It is also not possible for comparison to be made between the benchmark levels and the proposed alternatives without this model The impact of this is quite important when analyzing what the decision space is within which alternatives can be formulated.

The FOIA request was responded to as required, with a full disclosure of the information requested and the information sent We do not believe any violations of the Act occurred

21.148 **The goods and services to be produced and the timing and flow of the water resource outputs together with associated costs and benefits are not disclosed. Water yield is one example of not disclosing information required for each alternative.**

The same could be said for all other outputs as well. Timber is probably described in the most detail for outputs and costs. There is, however, no sale schedule for harvest.

Water yields by alternative are discussed in detail at various points throughout the Water section of Chapter III in the Draft EIS Table 3-49 on pg 3-230 of the DEIS summarizes water yields by alternative for the experienced budget Water yields by alternative for the full budget have been included in the FEIS

Outputs for all resources are disclosed as required in the DEIS and the FEIS A schedule of timber sales is not required A schedule of sales is conjecture on our part, and leads to expectations that are difficult to meet No schedules are included for any resource management

21.149 **Allowable Sale Quantity, ASQ, must be a number the Forest intends to realistically offer for sale and harvest. The timber industry needs to know this so investments can be made to correlate with the level of volume offered. The public needs to know what the Forest will produce in all resource areas.**

The FORPLAN model is an appropriate tool for the Forest to determine the mix and flow of goods and services to be produced.

Allowable Sale Quantity (ASQ) has always been, and will remain, the upper end of an acceptable range of harvest In the past it has been viewed incorrectly as a target to be achieved The depiction of budgets at the full and experienced level very realistically portrays what the RGNF expects to produce--and, we think, adequately addresses your concern

We have used FORPLAN as a timber harvesting and scheduling model We have not used it to model all resources During the last round of planning, many of the FORPLAN models in the country tried to model all resources Since the last round of planning, however, the analytical community has found that our knowledge of inter-resource relationships is really rather sketchy and certainly not statistically correlated enough to put into a mathematical model FORPLAN is only a tool, though, and the predictions from the computer sometimes do not match the situation on the ground

21.150 **These charts are helpful to the reader, as they allow clear indications of what is to be expected for activities within the Management Areas It is disappointing that these charts are identified in the document as clearly not a substitute for the S&Gs. What, then, do the charts mean? It would seem there is expected to be a conflict in the S&Gs which will change the information within these charts.**

It is most frustrating for the public to not know what is going to happen or be allowed in any of these alternatives. There is a general lack of specific information that would enable the public to know what to expect from the alternatives.

The charts are intended to show the public what activities are allowed in Management Areas, and what activities are not They are not, nor were they ever intended to be, substitutes for Standards and Guidelines

21.151 By mentioning this, all of the solution files and report files for these FORPLAN runs are included in the official planning records of the RGNF by reference.

The Planning Record for the RGNF is kept at the Forest Headquarters in Monte Vista, Colorado If you expect the documents or files you mention to be included in the Record, then you are required to cite what sections of the document they pertain to, and supply the RGNF with a copy of the solution and report files

21.152 The Standards and Guidelines for lands to produce forest products could be very limiting at the project level. These S&G requirements are potentially so limiting that the harvest could become zero depending on the interpretation and application of these "rules".

All alternatives were modeled and analyzed using the Standards and Guidelines We consider the outputs identified to be realistic expectations for each alternative

21.153 On what basis (law, regulation, etc.) does the RGNF assume management responsibility to provide for the perpetuation of natural landscape diversity?

The responsibility to perpetuate natural landscape diversity is contained in the language of all laws pertaining to the management of National Forest Lands

21.154 The premise in the introduction of this paper that "large landscapes ..<u>probably</u> have some predictable pattern of spatial configuration at coarse levels of resolution" (emphasis added) is disturbing. It looks like a tremendous amount of time and effort was spent analyzing the landscapes on the RGNF for some pattern that may not even exist This paper even says it may not exist. And, even if the patterns are found to exist, this type of management is not founded in regulation or law.

We disagree Forest planning is done by law and regulation, within the framework of the biological processes occurring in the National Forests

21.155 There are quite a few other problems with this paper. They include references to limitations of the original resource data available and stating that stand age classes would have been preferred but were not available in RMRIS. This is a field in RMRIS. Other Forests in the Region collect stand-age data and store them in RMRIS.

We are only being honest about the data that are not available It is likely that other Forests in the Region do not have data that we do We are aware of what RMRIS is

21.156 Another concern is that the objective was to "identify the best representation of natural, undisturbed spruce/fir landscapes on the Forest." Why are we now managing this National Forest with the objective of appearing undisturbed? The term "best" is a subjective call.

In the Standards and Guidelines section of the planning documents the Standard for scenic resources is that accepted as the current scenic condition The standard says this is true, "unless special, documented circumstances warrant a change " Any management on this National Forest will be a change In fact, any Nonmanagement on the National Forest

will be a change It is not known what documentation would be required, what public input would be involved, or what circumstances might warrant a change

The point is the National Forests were created for multiple-use management Webster defines "Manage" as "to control the movement of or behavior of " "Management" is synonymous with words like "control" and "achievement " The idea that this National Forest is to be managed to always look just like it does now is impossible and it is not based on any law or regulation

We believe that you are misinterpreting the paper Natural, undisturbed spruce/fir landscapes would be used as a baseline from which to measure degrees of acceptable change The intent is not to duplicate natural conditions exactly

The Standard and Guideline you cite references Scenic Condition Objectives, not current Scenic Conditions The change you reference is in the context of changing the Scenic Condition Objective

The National Forests are being (and will continue to be) managed under the multiple-use philosophy

21.157 **It is of concern that many Standards and Guidelines are stated in such a way that their interpretation is totally subjective. It is unknown how the RGNF can determine costs or outputs based on such vague S&Gs.**

The S&Gs were taken from a Regional "menu" and modified to match the conditions on the RGNF. They supplement existing laws, policies, and regulations The laws, policies, and regulations were not repeated in the Forest Plan, they have been incorporated by reference.

21.158 **Management Area 5.13, Forest Products, has no Standards. There should be Standards in this MA that insure the "emphasis on the production of commercial wood products," as the Theme states.**

If the Standards are to promote achievement of Goals and Objectives, these should be stated too. Goals and Objectives are not stated for any Management Area.

The organization of the statements within these Management Areas could be arranged...so it is clearly shown what is a "have to" and what is a "supposed to." The variation between Standard and Guideline is this distinction. It is not clear in this presentation how much of the Desired Conditions, the Setting, and the Theme are "have to" or "supposed to".

If there are no Standards listed for a Management Area, then the Forestwide Standards are considered sufficient Goals and Objectives are identified for the entire Forest and apply to all Management Areas.

Standards are listed as Standards, and Guidelines as Guidelines The distinction between the two should be obvious Desired Conditions, Settings, or Themes are not Standards and Guidelines.

21.159 **Standards and Guidelines While the ruling did require the RGNF to reanalyze the tentatively suitable lands, it did not require application of new Standards and Guidelines. The statement on DEIS pg. 6 implies the new S&Gs are a result of Finesilver's ruling. Finesilver's ruling does not require new Standards and Guidelines, and even if it did, new Standards and Guidelines should not be part of the NA Alternative. It is not clear why the RGNF applied new S&Gs to the No Action Alternative.**

We disagree The statement you are referring to is in the paragraph following the paragraph speaking to Finesilver, and is completely unrelated The rationale behind the No Action alternative and the way it is portrayed is explained on pg 2-3 and pg. 2-14 of the DEIS

21.160 **The Forest then reanalyzed its suitable lands and diminished its suitable acres from tentatively suitable acres 870,400 to 765,100. The Forest states that it used updated Standards and Guidelines in this procedure which was not required by the court order.**

It is not clear which Standards and Guidelines the forest used to determine suitable acres. Defining tentatively suitable acres is based on laws, regulations, and biological capability. Standards and Guidelines come into the picture at the part of the planning process when alternatives are defined.

You are misinterpreting the information presented. The criteria used for identifying tentatively suitable lands are presented on pg 2-14 of the DEIS The Standards and Guidelines are not part of these criteria

21.161 **The disclosure of different Themes for all the alternatives except NA is misleading. Every alternative has the same Standards and Guidelines. If the Theme for an alternative changes, it would be how many acres are allocated to each Management Area There is a Theme stated for each Management Area, and they are very different. How various amounts of acres applied to the Management Area Themes equate to the Theme of any of the alternatives is not clear.**

For example, under Recreation and Travel Management for Alternatives A and B only, it is stated that emphasis is on reducing miles of road causing resource damage. It would seem good management under all the alternatives to manage roads (whether constructing, maintaining, or closing) so that resource damage does not occur. The Forest is stating that resource damage is occurring under present management and that under alternatives D, E, and F the emphasis will not be on reducing this existing resource damage. This is inconsistent with the Objectives common to all alternatives. .These include "1. Protect the basic soil, air and water resources."

In the General Description of Each Alternative the Forest has portrayed its bias toward alternative D. The Theme descriptions of Alternatives NA, A, D, E, and F begin respectively as follows (no theme for NA), Some people think, Some people feel, Many people feel, and (no statement about people feeling or thinking in F). It is believed the public will be comparing the alternatives based on these Theme statements. These Theme paragraphs are laden with subjectivity. They are not true representatives of the alternatives and should be either eliminated or rewritten

There are no requirements to vary Standards and Guidelines by alternative The mix of land allocations in each alternative is designed to achieve the emphasis for the alternative Management-Area themes would be different than alternatives Management-Area themes do not vary, alternative themes do

All alternatives are consistent with Regional Objectives Some alternatives place more emphasis on road closures than others, but resource damage is not being ignored in any of them

Alternative Themes were developed with the assistance of all of the public work groups The statements were crafted carefully to address the concerns identified by these people Readers are directed to various parts of the DEIS to compare alternatives

They are not directed to read the Themes in order to facilitate a comparison We do not agree, however, that they need to be rewritten.

21.162 **The graphic comparisons between alternatives make the planning documents more pleasing to view. Bar-graph representations do enable the reader to relate several numbers to each other.**

The FS needs to be very careful how they present data in graphical presentations. As an example, the graph on DEIS 3-108, Figure 3-23, Acres of Clearcut and Overstory Removal, will be used here. It would seem the purpose of this graph is to enable the comparison of acres treated between alternatives. To compare them is a good objective and should be done in the DEIS The exact acres in the graphs presented below are not correct (exact acres aren't given in the DEIS but they are close enough to make a point).

To put this task of comparing alternatives and their impacts in proper perspective, the graph should have been presented with all the suitable acres on the left axis, enabling the reader to compare the differences in alternatives with the measuring stick of suitable acres. This would enable the situation to be viewed more from an ecosystem management perspective. From this perspective the alternatives are not significantly different. Might it be suggested the analysis of both levels is valid, but only one level has been presented to the public.

Interactions with the public in over 100 meetings throughout the Revision process have led us to believe that people are interested in how much timber management (acres of clearcut, shelterwood, etc) is occurring in each alternative

The graph you suggest has a skewed scale You advocate using all of the tentatively suitable lands on the left axis The alternatives employ only suitable lands Your scale should use the range of suitable lands in each alternative This is essentially the same as the chart we originally used The chart you suggest offers no reasonable means of comparison between the alternatives

21.163 **From these presentations it is not possible to tell which alternative provides the most recreational opportunity. Several comparisons are made between the 1985 Plan and an alternative, but not between the alternatives. The public cannot determine the real differences between the alternatives.**

The wording in the descriptions of the alternatives is intended as an overview to give people the feel or flavor of the alternative Readers are expected to go to other parts of the DEIS to find information pertinent to the resources or issues that most concern them, to see the quantitative differences between the alternatives There is quantitative information for all resources, as well as comparisons of the alternatives, in Chapter III of the DEIS

21 164 **Table 3-35 (DEIS pg. 3-138) titled Percentage of Land Allocated by Management Emphasis and Alternative is very misleading as it implies that all acres in the categories 5-8 will be impacted in this Plan by some activity. Without stating rotation ages it is not possible to calculate how many acres will be harvested under the Standards and Guidelines but it is definitely known that all acres that are projected to be harvested will not be harvested in the life of this Plan.**

This table implies that Alternative B, for example, will disturb the entire 59% of the Forest. This is inconsistent with statements in the documents that show very little of the acreage of this Forest has been affected by timber harvest. With an ASQ of 20.9 MMBF (Reference RGD1) in the preferred alternative compared to the historic harvest levels, there will be less acres impacted in the future. The DEIS Summary (page 18)